PHASE III, IV, AND VI COMPLETION REPORT

Former Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

Prepared for:

Pechiney Cast Plate, Inc.

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Project No. 0106270030

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This report was prepared by the staff of AMEC Environment & Infrastructure, Inc. under the supervision of the Geologists whose signatures appear hereon.

The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.

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ACRONYMS

ACM	asbestos containing materials
AIS	American Integrated Services, Inc.
AMEC	AMEC Environment & Infrastructure, Inc.
Aurora	Aurora Industrial Hygiene, Inc.
DTSC	California Department of Toxic Substances Control
FS	Feasibility Study (AMEC, 2012a)
mg/kg	milligrams per kilogram
NORM	Natural Occurring Radioactive Material
µg/100 cm^2	micrograms per 100 centimeters squared
MSL	mean sea elevation
OSI	Occupational Services, Inc.
Pechiney	Pechiney Cast Plate, Inc.
PCBs	polychlorinated biphenyls
Plan	Revised Below Grade Demolition Plan (AMEC, 2012d)
RAO	remedial action objective
RAP	Remedial Action Plan (AMEC, 2012c)
Report	Phase IIIA, IIIB, IV and VI Areas Completion Report
Rio Tinto	Rio Tinto, AUM
SAP	Sampling and Analysis Plan (AMEC, 2010)
site	Former Pechiney Cast Plate, Inc. Facility, located at 3200 Fruitland Avenue, Vernon, California
SVE	soil vapor extraction
TPH	total petroleum hydrocarbons
TSCA	Toxic Substances Control Act
UPRR	Union Pacific Rail Road
US EPA	United States Environmental Protection Agency, Region IX
VOC	volatile organic compound

PHASE III, IV, AND VI AREA COMPLETION REPORT
Former Pechiney Cast Plate, Inc. Facility
Vernon, California

1.0 INTRODUCTION AND BACKGROUND

On behalf of Pechiney Cast Plate, Inc. (Pechiney), AMEC Environment & Infrastructure, Inc. (AMEC), prepared this report (Report) to document the completion of the below grade demolition and soil removal work for the Phase III, IV, and VI Areas of the former Pechiney Facility, located at 3200 Fruitland Avenue, in Vernon, California (site; Figure 1). This Report documents response actions taken by the former Pechiney facility to perform below grade demolition of the facility and to conduct soil removal actions outlined in the Remedial Action Plan (RAP; AMEC, 2012c). These actions, including verification sampling and analysis, waste removal and off-site disposal, were conducted as stated herein this Report and in conformance with the Revised Below Grade Demolition Plan (Plan) (AMEC, 2012d). The Plan was approved by the City of Vernon Community Services. The RAP was approved by the California Department of Toxic Substances Control (DTSC) and the polychlorinated biphenyl (PCB) elements were conditionally approved by United States Environmental Protection Agency, Region IX (US EPA).

In order to expedite the review process for this project, the site has been divided into four areas with four completion reports, one for each area, which will be submitted to the DTSC, the US EPA, and the City of Vernon Community Services. The completion report for the Phase I Area was submitted on June 9, 2014 and the completion report for the Phase V Area was submitted on September 26, 2014. The completion report for the Phase II Area will be submitted in the near future.

A Feasibility Study (FS; AMEC, 2012a) was prepared on behalf of Pechiney to evaluate potential remedial technologies and provide recommendations for the proposed, preferred remedy for impacted soil and soil vapor in the vadose zone and for impacted concrete at the site. Based on the FS, the RAP (AMEC, 2012c) was prepared to provide the details and procedures to be used for remediating PCB-impacted concrete during demolition of below-grade features present at the site and remediating impacted soil encountered during below grade demolition. The RAP was approved by DTSC on June 28, 2012, and pursuant to the Toxic Substances Control Act (TSCA), the PCB elements of the RAP were conditionally approved by US EPA (US EPA, 2010 and 2011).

The soil removal work in the Phase III, IV, and VI Areas (Figures 2 and 3) was conducted in accordance with the RAP. The RAP included a summary of the site background; site history;

regional, local, and site geology and hydrogeology; results of previous investigations and constituents of potential concern; results of a soil screening evaluation; remedial action objectives (RAOs); criteria used to establish these objectives; site-specific risk-based remediation goals for soil; and scope of the remedial action; and protocols for verification sampling to be conducted after completing demolition and remedial activities.

The Plan (AMEC, 2012d) was submitted to the City of Vernon Community Services on November 30, 2011 and implementation of the Plan was approved by Community Services with the issuance of the permits for the below grade demolition work (permit # B00-088-125) and site grading (permit # B00-088-126) on October 22, 2012 (re-issued August 22, 2013 and November 5, 2012, respectively) to American Integrated Services, Inc. (AIS) of Wilmington, California, the contractor selected by Pechiney to perform the work. The below grade demolition work was conducted as described in the Plan. As noted in the Plan, soil removal was planned only for areas where metals or PCBs were detected in shallow soil at concentrations exceeding site-specific risk-based remediation goals for future commercial/industrial site use pursuant to the FS and RAP. Soil remediation for volatile organic compounds (VOCs) using soil vapor extraction (SVE) was performed prior to beginning the demolition work and SVE will continue in the Phase III and Phase IV Areas and other areas of the site (Phase I) after completion of the below grade demolition work. SVE was suspended during the demolition work to allow access to the work areas.

The below grade demolition and soil removal work was conducted by AIS under contract to Pechiney. AMEC observed AIS' work and conducted the soil verification sampling and perimeter air monitoring with the assistance of Aurora Industrial Hygiene (Aurora).

2.0 SCOPE OF WORK AND REMEDIATION GOALS

As described in the RAP and Plan, the scope of work for concrete and soil removals included the following work.

- Site mobilization, preparation and below grade demolition permitting. As part of site mobilization and preparation, SVE in the Phase III and IV Areas was suspended, the SVE system and piping was deactivated and removed, and the SVE wells, vapor probes, and groundwater monitoring wells were protected during the demolition work.

- Demarcation, removal, and offsite disposal of PCB-impacted concrete with PCB concentrations greater than 1 milligram per kilogram (mg/kg) as encountered during the below grade work.

- Demarcation, excavation, verification soil sampling, and offsite disposal of PCB-impacted soil using in situ data as well as arsenic-impacted soil. The PCB soil

removal areas identified in the RAP are shown on Figure 3 (Soil Removal Areas in the Phase III, IV, and VI Areas include Areas 6a, 6b, 7, 9a, 9b, 9d, 12, and 14).

- Testing and removal of below grade structures within the upper 10 feet relative to the surface elevation of the eastern parking lot nearest the structure (identified as 182 or 183 feet mean sea level [MSL]), and capping deeper structures in place. In situ testing of the concrete structures was conducted as needed to select the disposition of the concrete and the potential need to collect soil samples below the structures.

- Collection of verification soil samples below PCB-impacted concrete slabs and structures, encountered during below grade work.

- Identification, verification sampling, handling, and disposal of impacted soil encountered during below grade demolition work.

- Removal of underground piping and utilities within the upper 3 feet of soil beneath the concrete slab and terminating utility conduits at the site boundary.

- Removal and disposal of buried rail lines and sampling soil below these rail lines.

- Conducting perimeter air monitoring as described in the Revised Perimeter Air Monitoring Plan (AMEC, 2011). The final results of this monitoring will be provided in the final completion report for the project.

- Backfill, compaction and site grading, which is still in progress for the Phase IIIB Area.

A brief summary of the concrete sampling and removal work; soil removal, verification soil sampling, placement of backfill materials; other media sampled; waste management and disposal; and below grade demolition work is provided below. The RAP site-specific remediation goals used for soil and concrete are provided in Table 1. In addition, the site-specific PCB remediation goal for concrete was set at greater than 1 mg/kg.

3.0 CONCRETE SAMPLING AND REMOVAL

As concrete slab removal progressed, isolated areas of stained concrete (black or pink to magenta in color) and/or layered concrete, were encountered and evaluated by collecting and analyzing concrete core samples to evaluate the potential presence of PCBs. The sampling grid/locations and methods used were conducted as described in the Sampling and Analysis Plan (SAP; AMEC, 2010) and RAP. Based on the concrete sampling results, additional areas of PCB-impacted concrete were identified and demarcated for removal and off-site disposal. Concrete containing total PCB concentrations greater than 1 mg/kg was transported off site for disposal. A summary of the concrete sample results are provided in Table 2 and the approximate sample locations are shown on Figure 4. Analytical laboratory reports are included in Appendix A.

As the concrete slabs were removed, the underlying soil below grade concrete structures were exposed in sections and the below grade structures were tested for the presence of PCBs using the sampling methods used for the concrete slab. In addition to testing the below grade concrete structures, material found within the structures, such as pea gravel, was also tested for PCBs. The concrete and other material samples collected and analyzed from these structures were used to select the methods for managing the concrete and backfill material (e.g., released for on-site crushing or transported off site for disposal). A summary of the concrete sample results is provided in Table 2, and approximate sample locations of the concrete and other material samples are shown on Figure 5. Analytical laboratory reports are included in Appendix A.

4.0 SOIL REMOVAL, VERIFICATION SAMPLING, AND BACKFILL

Phase III, IV, and VI soil removal areas identified in the RAP as Areas 6a, 6b, 7, 9a, 9b, 9d, 12, and 14 were marked and the soil was excavated before the below grade structures in each area were removed. After the soil was excavated, verification soil sampling for PCBs and/or arsenic was conducted as described in the SAP and RAP. In addition, isolated areas of lead- and TPH-impacted soil were encountered and excavated.

As below grade structures and underground piping was encountered and tested, soil sampling below these features was conducted as outlined in the SAP and RAP. Based on this testing, additional areas of PCB- (and other chemicals of concern) impacted soil was identified that required removal for off-site disposal. The location of the soil removal areas and soil sample locations are shown on Figure 6 (all locations), Figure 7 (PCB for soil between 0 and 5 feet), and Figure 8 (PCBs for soil between 5 and 15 feet). As shown on Figure 6, the majority of the concrete structures that were removed during the below grade demolition work were located in the western and central portion of the Phase III, IV, and VI Areas.

A summary of the soil sample results are provided in Table 3 and the analytical laboratory reports are included in Appendix A. The approximate verification soil sample locations are shown on Figures 6, 7, and 8. Soil sample locations that were excavated in the Phase III, IV, and VI Areas are shown in gray on Figures 7 and 8, and listed in Table 3 as such with an “E”. The remaining soil sample locations shown in color on Figures 7 and 8 remain in place below the site-specific remediation goals with the exception of the verification sample on the southern sidewall of the Area 12 soil removal. This sample location is directly adjacent to the Union Pacific Rail Road (UPRR) property boundary and further excavation to the south was not possible due to the fencing.

Based on the verification sampling in the soil removal areas, the Phase III, IV, and VI Areas were released for backfill and completion as described in Section 7.0 below. The soil removal

areas were backfilled with crushed concrete generated onsite. Import fill soil was used to backfill portions of Phase IIIB. Analytical laboratory reports for the import fill soil are included in Appendix B.

5.0 OTHER MATERIALS OR MEDIA SAMPLED

As the below grade demolition work progressed, other building materials were encountered and required testing for asbestos (ACMs). In addition, below grade piping was also tested for PCBs using wipe sample methods, and where observed, the contents of the piping were tested.

Suspect ACMs were observed along the edge of the concrete slab, and as a result, Aurora conducted a site reconnaissance in September 2013 to assess the presence of other suspect ACMs. During the reconnaissance, Aurora conducted ACM testing on exposed expansion joint material, a moisture barrier material, and remaining floor tiles. Based on testing, a small section of expansion joint material, the moisture barrier material and floor tiles tested positive for ACM. A copy of the ACM summary report is included in Appendix C. As suspect material was encountered during the below grade work, additional ACM testing was conducted (including transite piping). The materials identified with ACM were abated by AIS and managed for off-site disposal as ACM-impacted. Laboratory reports for the ACM analyses are included in Appendix C.

Wipe samples of piping sections were collected by AIS and analyzed for PCBs. The wipe sample results, sample locations and analytical laboratory reports are included in Appendix D. Pipe sections, with wipe samples exhibiting PCBs at concentrations greater than 1 microgram per 100 centimeters squared (µg/100 cm^2), were removed and shipped offsite for disposal. In addition to wipe samples, AMEC collected samples of material contained within piping sections. The locations of these samples are shown on Figure 5, and results are summarized in Tables 3, 4, 5 and 6, as applicable. If PCBs were detected in the material contained within piping, the pipe section was shipped offsite for disposal. The remaining below grade metal piping was removed and shipped offsite for recycling.

In addition, debris composed of refractory bricks was encountered below the concrete slab in isolated areas of the site. Occupational Services, Inc. (OSI) collected representative samples of this material for isotopic analysis, and determined that the bricks contained low levels of natural uranium and thorium daughter products. A copy of OSI's summary report is included in Appendix E. Based on the findings, the refractory brick debris was managed for disposal as a Natural Occurring Radioactive Material (NORM) waste.

6.0 WASTE MANAGEMENT AND DISPOSAL

Waste materials generated during below grade demolition and soil removal work were transported off site to appropriate disposal facilities during the course of the project. Waste materials included demolition debris, refractory brick debris, various liquids and solids. Vehicles and equipment leaving the site were cleaned of soil and dust prior to leaving the site. AIS were responsible for securing and covering transport vehicles and containers pursuant to applicable Department of Transportation requirements.

Waste materials were sampled and profiled pursuant to applicable regulatory and Treatment, Storage, and Disposal Facility requirements prior to any materials leaving the site. Soil and concrete and other media impacted with PCBs were profiled for disposal based on in situ concentrations pursuant to US EPA's conditional approval letter (US EPA, 2010). Transportation and disposal activities were performed in compliance with applicable state, local, and/or federal laws, and as outlined in the Hazardous Materials Transportation Plan (AMEC, 2012b).

Table 7 provides the approximate quantities of materials removed from the Phase III, IV, and VI Areas during the below grade demolition and soil removal work as well as the associated disposal facilities. A final summary of the waste quantities, waste profiles and signed manifests for materials shipped off site for disposal from the Phase III, IV, and VI Areas will be provided in the final completion report for the site.

7.0 BELOW GRADE DEMOLITION AND STRUCTURE REMOVALS

Below grade structures were encountered in the western and central portion of the Phase III, IV, and VI areas as described in the Plan (AMEC, 2012d). Major below grade structures in the northwest and west sides of the Phase IIIA and IV area included the former hot well and cooling tower, former Swindell Furnace Pit (Swindell Pit), interconnecting tunnels, associated sumps and vaults, and former equipment pits. Some of the structures had been filled with pea gravel and then covered with the concrete pad that formerly served as the floor slab for the former building. The locations of the below grade structures are shown on Figure 9, which also depicts the anticipated location of the structure (shaded gray) compared to the actual location of the structure (shaded black).

The below grade structures encountered in the Phase III, IV, and VI Areas were removed completely except for structure 827 located in the Phase IV Area. Structure 827 was known as a former Swindell Pit. The former Swindell Pit was described in the Plan as being approximately 19 feet in diameter and 40 to 43 feet below the concrete slab. The Swindell Pit was exposed and demolished to a depth of approximately 12 feet below the corresponding elevation at the eastern parking lot as described in the Plan or about 170 feet MSL (AMEC,

2012d). The remaining, exposed concrete and pea gravel were tested for PCBs and the structure was prepared for capping. A six- to eight-inch thick concrete cover was placed over, and in contact with, the remaining portion of the former Swindell Pit. A licensed land surveyor conducted a survey to document the location of the former Swindell Pit and the elevation of the concrete cover (Appendix F).

Structural footings were also removed during the demolition activities. Each footing that was encountered was removed in its entirety and no portion of the footings are known to remain in place after completing the demolition work in the Phase III, IV, and VI Areas.

Several structures that were shown in the Plan in the area of Former Building 112 were not encountered during demolition (Figure 9). These structures included an approximate 8 foot by 60 foot trench in the northeast corner of former Building 112 and the structures associated with the former age-anneal ovens. To confirm that the structures were not present, an approximate 10 foot deep trench was excavated perpendicular to the reported central portion of the structure as shown in the Plan. In each case, the structure was not encountered and was subsequently considered to not be present.

Concrete that did not contain PCBs at concentrations greater than 1 mg/kg, was transferred to a concrete stockpile for crushing. The crushed concrete was later used for backfill material at the site and to cover the site in conformance with the Plan (AMEC, 2012d). Gradation reports for the crushed concrete will be provided in the final completion report for the site.

The excavation areas were backfilled by recontouring the remaining site soil, and using crushed concrete and import soil for backfill. The backfill material was compacted in conformance with the Plan (AMEC, 2012d). The results of the compaction testing are provided in Appendix G for the Phase IIIA and IV Areas. As of the date of this report, final grading of Phase IIIB is not complete. The results of the compaction testing for Phase IIIB and the record drawings of the final site grading will be provided in the final completion report for the site.

As specified by the Plan (AMEC, 2012d), underground piping and utilities that were encountered in the upper 3 feet of the site were removed. No utility piping extended off site in the Phase III, IV, and VI Areas. The locations of utilities that were removed are shown on Figures 10A and B. A final site-wide record drawing for these features will be provided in the final completion report for the site.

8.0 CONCLUSIONS AND VERIFICATION OF COMPLETION

AMEC received notification from AIS that they had completed their scope of work for below grade demolition and soil removal work in the Phase III, IV, and VI Areas, with the exception of the final site grading in Phase IIIB (which is in progress). AIS prepared a record drawing (Figures 10A and B) illustrating locations of removed utilities and structures. In addition, AMEC completed verification sampling related to PCBs and/or arsenic and confirms that the soil removals outlined in the RAP and those that were discovered in the course of the demolition work were completed with the exception of the Area 12 soil removal. The arsenic concentration on the southern side wall of the Area 12 soil removal excavation exceeded the site-specific clean up goal of 10 mg/kg. The southern side wall of this excavation is adjacent to the UPRR property boundary so further excavation in this area was not possible.

In addition, this report is being submitted to the City of Vernon Community Services to document the completion of the below grade demolition work in the Phase III, IV, and VI Areas in accordance with the Plan.

This Report documents response actions taken by Pechiney to perform below grade demolition of the facility and the conduct the soil removal actions outlined in the RAP. These actions, including verification sampling and analysis procedures, waste removal and off-site disposal, were conducted as stated herein this Report and in conformity with the Plan prepared by AMEC (AMEC, 2012d) and approved by the City of Vernon Community Services and the RAP prepared by AMEC (AMEC, 2012c) and approved by the DTSC and the PCB elements conditionally approved by US EPA.

This certification does not warrant or guarantee that all hazardous materials have been completely removed from the site. Hazardous materials may be present at the site in environmental media including soil, soil vapor, and groundwater as a result of not being encountered or identified during below grade demolition activities or previous site assessments.

9.0 REFERENCES

AMEC Environment & Infrastructure, Inc. (AMEC), 2010, Concrete and Soil Sampling and Analysis Plan, Draft, Former Pechiney Cast Plate, Inc., Facility, Vernon, California, July 27.

AMEC, 2011, Revised Perimeter Air Monitoring Plan, Below Grade Demolition and Remediation Activities, Former Pechiney Cast Plate, Inc. Facility, Vernon, California, revised October 28.

AMEC, 2012a, Feasibility Study, Former Pechiney Cast Plate, Inc., Facility, Vernon, California, May 7.

AMEC, 2012b, Hazardous Materials Transportation Plan, Former Pechiney Cast Plate, Inc., Facility, Vernon, California, November, 2010, revised April 12.

AMEC, 2012c, Remedial Action Plan, Former Pechiney Cast Plate, Inc. Facility, 3200 Fruitland Avenue, Vernon, California, June, 28.

AMEC, 2012d, Revised Below Grade Demolition Plan, Former Pechiney Cast Plate, Inc. Facility, 3200 Fruitland Avenue, Vernon, California, August, 31.

AMEC and American Integrated Services, Inc., 2011, Storm Water Pollution Prevention Plan, Former Pechiney Cast Plate Facility, Vernon, California, WDID 419C342261, prepared for Regional Water Quality Control Board – Region 4, Los Angeles, August 31.

United States Environmental Protection Agency, Region IX (U.S. EPA), 2010, Polychlorinated Biphenyls – U.S. EPA Conditional Approval Under 40 CFR 761.61(c), Toxic Substances Control Act – "Polychlorinated Biphenyls Notification Plan, Former Pechiney Cast Plate, Inc., Facility, Vernon, California, July 9, 2009," Letter from Jeff Scott, Director, Waste Management Division, to Donald Thompson, President Pechiney Cast Plate, July 2.

U.S. EPA, 2011, Polychlorinated Biphenyls – U.S. EPA Conditional Approval Under 40 CFR 761.61(c), Toxic Substances Control Act – "Polychlorinated Biphenyls Notification Plan, Former Pechiney Cast Plate, Inc., Facility, Vernon, California, July 9, 2009," Letter providing conditional approval of the PCB Cleanup Levels from Jeff Scott, Director, Waste Management Division, to Donald Thompson, President Pechiney Cast Plate, July 1.

TABLES

TABLE 1

SITE-SPECIFIC REMEDIATION GOALS -
PCBs IN SOIL AND CONCRETE, AND METALS AND TPH IN SOIL
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

Compound	Remediation Goal (mg/kg)	Explanation
PCBs in Soil		
Aroclor-1254	2.0	Noncarcinogenic RBSL[1] for construction workers. Also protective of commercial/industrial worker exposure.
Total Aroclors *For soil that may be left exposed at the surface (0 to 5 feet bgs)*	3.5	Based on the regression analysis for dioxin-like PCB congeners versus total Aroclors in combined soil and concrete presented in Appendix E of the FS (AMEC, 2012a), the total Aroclor concentration that would result in a maximum dioxin TEQ concentration of 81 pg/g.[2] Protective of cumulative commercial/industrial worker exposure, and cumulative construction worker exposure, to PCBs.
Total Aroclors *For subsurface soil (5 to 15 feet bgs) that only construction workers may come into contact with during excavation, grading, etc. (and that would remain at 5 to 15 feet bgs)*	23	Based on the regression analysis for dioxin-like PCB congeners versus total Aroclors in combined soil and concrete presented in Appendix E of the FS (AMEC, 2012a), the total Aroclor concentration that would result in a maximum dioxin TEQ concentration of 530 pg/g.[3] Protective of cumulative construction worker exposure to PCBs.
PCBs in Concrete		
Total Aroclors	3.5	Based on the regression analysis for dioxin-like PCB congeners versus total Aroclors in combined soil and concrete presented in Appendix E of the FS (AMEC, 2012a), the total Aroclor concentration that would result in a maximum dioxin TEQ concentration of 81 pg/g. Also protective of cumulative construction worker exposure to PCBs. Applying this remediation goal ensures that waste criteria for concrete containing PCBs is also met [i.e., less than 50 mg/kg, as defined in 40 CFR Section 761.61(a)(4)(i)(A)].
Metals in Soil		
Arsenic	10	Site-Specific Background Concentration in Soil, established as described in Appendix B of the FS (AMEC, 2012a).
Chromium	25	Site-Specific Background Concentration in Soil, established as described in Appendix B of the FS (AMEC, 2012a).
Lead	320	RBSL in Soil for Outdoor Commercial/Industrial Worker, established as described in Appendix C of the FS (AMEC, 2012a)
TPH in Soil		
c5-c10 hydrocarbons, c6-c10 hydrocarbons, c7-c12 hydrocarbons, and Stoddard solvent	500	Screening Level for the Protection of Groundwater for TPH gasoline range (c4-c12) from the Los Angeles RWQCB Guidebook.[4]
c10-c20 hydrocarbons and c10-c28 hydrocarbons	1000	Screening Level for the Protection of Groundwater for TPH diesel range (c13-c22) from the Los Angeles RWQCB Guidebook.[4]
c21-c28 hydrocarbons	10,000	Screening Level for the Protection of Groundwater for TPH as residual fuel (c23-c32) from the Los Angeles RWQCB Guidebook.[4]

Notes
1. Developed based on the methodology described in Appendix C of the FS (AMEC, 2012a), RBSLs were used to conduct the screening-level human health risk assessment for the Site.
2. Based on the carcinogenic RBSL for dioxin-like PCB congeners for outdoor commercial/industrial workers (8.1 pg/g TEQ), adjusted to a target cancer risk of 10-5.
3. Based on the carcinogenic RBSL for dioxin-like PCB congeners for construction workers (53 pg/g TEQ), adjusted to a target cancer risk of 10-5.
4. Los Angeles RWQCB Interim Site Assessment and Cleanup Guidebook (RWQCB Guidebook, May 1996; updated May 2004), for petroleum hydrocarbons and aromatic hydrocarbons (benzene, toluene, ethylbenzene, and total xylenes [BTEX] compounds) in soil. The selected screening levels were taken from Table 4-1 assuming distance above groundwater is 20 to 150 feet.

Abbreviations
bgs = below ground surface
CFR = Code of Federal Regulations
FS = Feasibility Study
mg/kg = milligrams per kilogram
PCBs = polychlorinated biphenyls
pg/g = picograms/gram
RBSL = risk-based screening level
RWQCB = California Regional Water Quality Control Board
TEQ = toxic equivalent
TPH = total petroleum hydrocarbons

TABLE 2

CONCRETE SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082, units in ug/kg, unless otherwise specified

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IIIA	293-IIIA-P/S-CS-034	293-CS-034	6/3/2014	NA	NA	293	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Base of smaller manhole
IIIA	293-IIIA-P/S-CS-035	293-CS-035	6/3/2014	NA	NA	293	C	co	NA	NA	<50	<50	<50	<50	140	<50	97J	<50	<50	237	0.237	Base of larger manhole
IIIA	293-IIIA-P/S-CS-036	293-CS-036	6/19/2014	NA	NA	293	C	co	NA	NA	<50	<50	<50	<50	310	<50	55J	<50	<50	365	0.365	Base of manhole vault
IIIA	293-IIIA-P/S-CS-037	293-CS-037	6/19/2014	NA	NA	293	C	co	NA	NA	<50	<50	<50	<50	120	<50	<50UJ	<50	<50	120	0.12	Inside wall of manhole vault
IIIA	293-IIIB-P/S-CS-033	293-CS-033	5/20/2014	NA	NA	293	D	co	NA	NA	<5000	<5000	<5000	<5000	250000	<5000	8200	<5000	<5000	258200	258.2	4'x4'x8' "hot well" vault, pink concrete.
IIIA	293-IV-P/S-CS-001	293-CS-001	12/4/2013	NA	NA	293	C	co	7	176	<50	<50	<50	<50	270	<50	63	<50	<50	333	0.333	Cooling tower, South sidewall
IIIA	293-IV-P/S-CS-002	293-CS-002	12/4/2013	NA	NA	293	D	co	4	179	<50	<50	<50	<50	500	<50	<50	<50	<50	500	0.5	Cooling tower, South sidewall
IIIA	293-IV-P/S-CS-003	293-CS-003	12/4/2013	NA	NA	293	C	co	4	179	<500	<500	<500	<500	92000	<500	4700	<500	<500	96700	96.7	Cooling tower, West sidewall
IIIA	293-IV-P/S-CS-004	293-CS-004	12/4/2013	NA	NA	293	D	co	10	173	<5000	<5000	<5000	<5000	180000	<5000	11000	<5000	<5000	191000	191	Cooling tower, West sidewall
IIIA	293-IV-P/S-CS-005	293-CS-005	12/4/2013	NA	NA	293	C	co	9	174	<50	<50	<50	<50	150	<50	<50	<50	<50	150	0.15	Cooling tower, North sidewall
IIIA	293-IV-P/S-CS-006	293-CS-006	12/4/2013	NA	NA	293	D	co	6	177	<5000	<5000	<5000	<5000	230000	<5000	22000	<5000	<5000	252000	252	Cooling tower, North sidewall
IIIA	293-IV-P/S-CS-007	293-CS-007	12/4/2013	NA	NA	293	D	co	10	173	<500	<500	<500	<500	85000	<500	5600	<500	<500	90600	90.6	Cooling tower, East sidewall
IIIA	293-IV-P/S-CS-008	293-CS-008	12/4/2013	NA	NA	293	D	co	4	179	<500	<500	<500	<500	130000	<500	5800	<500	<500	135800	135.8	Cooling tower, East sidewall
IIIA	293-IV-P/S-CS-009	293-CS-009	12/4/2013	NA	NA	293	D	co	12	171	<500	<500	<500	<500	220000	<500	5900	<500	<500	225900	225.9	Cooling tower, Floor, Northwest side
IIIA	293-IV-P/S-CS-010	293-CS-010	12/4/2013	NA	NA	293	D	co	12	171	<500	<500	<500	<500	68000	<500	1500	<500	<500	69500	69.5	Cooling tower, Floor, Southeast side
IIIA	293-IV-P/S-CS-011	293-CS-011	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	150	<50	<50	<50	<50	150	0.15	Pillar, East side
IIIA	293-IV-P/S-CS-012	293-CS-012	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	51	<50	<50	<50	<50	51	0.051	Pillar, South side
IIIA	293-IV-P/S-CS-013	293-CS-013	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	350	<50	90J	<50	<50	440	0.44	Wall sample
IIIA	293-IV-P/S-CS-014	293-CS-014	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	62	<50	<50	<50	<50	62	0.062	Wall sample
IIIA	293-IV-P/S-CS-015	293-CS-015	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	94	<50	<50	<50	<50	94	0.094	Wall sample
IIIA	293-IV-P/S-CS-016	293-CS-016	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Wall sample
IIIA	293-IV-P/S-CS-017	293-CS-017	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Wall sample
IIIA	293-IV-P/S-CS-018	293-CS-018	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	77	<50	56J	<50	<50	133	0.133	Pillar, West side
IIIA	293-IV-P/S-CS-019	293-CS-019	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	150	<50	<50	<50	<50	150	0.15	Pillar, West side
IIIA	293-IV-P/S-CS-020	293-CS-020	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Pillar, East side
IIIA	293-IV-P/S-CS-021	293-CS-021	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	390	<50	63J	<50	<50	453	0.453	Wall sample
IIIA	293-IV-P/S-CS-022	293-CS-022	12/5/2013	NA	NA	293	C	co	4	179	<50	<50	<50	<50	660	<50	86J	<50	<50	746	0.746	Wall sample
IIIA	293-IV-P/S-CS-023	293-CS-023	12/5/2013	NA	NA	293	C	co	12	171	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Floor sample
IIIA	293-IV-P/S-CS-024	293-CS-024	12/5/2013	NA	NA	293	C	co	12	171	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Floor sample
IIIA	293-IV-P/S-CS-025	293-CS-025	12/5/2013	NA	NA	293	C	co	12	171	<50	<50	<50	<50	78	<50	<50	<50	<50	78	0.078	Floor sample
IIIA	293-IV-P/S-CS-026	293-CS-026	12/5/2013	NA	NA	293	C	co	12	171	<50	<50	<50	<50	69	<50	<50	<50	<50	69	0.069	Floor sample
IIIA	293-IV-P/S-CS-027	293-CS-027	12/5/2013	NA	NA	293	C	co	12	171	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Central pillar, East side
IIIA	293-IV-P/S-CS-028	293-CS-028	12/5/2013	NA	NA	293	C	co	12	171	<50	<50	<50	<50	57	<50	<50	<50	<50	57	0.057	Central pillar, East side

TABLE 2

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Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082, units in ug/kg, unless otherwise specified

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IIIA	293-IV-P/S-CS-029	293-CS-029	12/5/2013	NA	NA	293	C	co	12	171	<50	<50	<50	<50	79	<50	55J	<50	<50	134	0.134	Central pillar, East side
IIIA	293-IV-P/S-CS-030	293-CS-030	12/5/2013	NA	NA	293	C	co	12	171	<50	<50	<50	<50	200	<50	120J	<50	<50	320	0.32	Central pillar, North side
IIIA	293-IV-P/S-CS-031	293-CS-031	5/8/2014	NA	NA	293	C	co	5	178	<50	<50	<50	<50	86	<50	93	<50	<50	179	0.179	Hot well, side of vault
IIIA	293-IV-P/S-CS-032	293-CS-032	5/8/2014	NA	NA	293	D	co	5	178	<500	<500	<500	<500	34000J	<500	8400J	<500	<500	42400	42.4	Inside wall of vault
IIIA	293-IV-P/S-O-002	293-O-002	5/8/2014	NA	NA	293	C	pg	1	182	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Pea gravel from pit; East side of Hot well area
IIIA	293-IV-P/S-O-003	293-O-003	5/8/2014	NA	NA	293	D	ot	6	177	<2500	<2500	<2500	<2500	14000J	<2500	4000J	<2500	<2500	18000	18	Sludge sample (black) from pit, South of Cooling Tower area
IIIA	293-IV-P/S-O-004	293-O-004	5/14/2014	NA	NA	293	D	pg	NA	NA	<50	<50	<50	<50	6800	<50	510	<50	<50	7310	7.31	Pea gravel from pit on east side of hot well. Deeper sample collected. Related to 293-IV-P/S-O-002 sample (collected immediately below top concrete cover). Sample collected approx. 8' below concrete cover.
IIIA	920-IIIA-CS-CS-001	920-CS-001	6/26/2014	NA	NA	920	C	co	NA	NA	<20	<20	<20	<20	<20	30	21	--	<20	51	0.051	NA
IIIA	920-IIIA-CS-CS-002	920-CS-002	6/26/2014	NA	NA	920	C	co	NA	NA	<20	<20	<20	<20	68	150	24	--	<20	242	0.242	From exterior of broken pit structure
IIIA	921-IIIA-CS-CS-001	921-CS-001	6/26/2014	NA	NA	921	C	co	NA	NA	<20	<20	<20	<20	49	130	37	--	<20	216	0.216	NA
IIIA	921-IIIA-CS-CS-002	921-CS-002	6/26/2014	NA	NA	921	C	co	NA	NA	<20	<20	<20	<20	51	72	24	--	<20	147	0.147	NA
IIIA	922-IIIA-CS-CS-001	922-CS-001	6/26/2014	NA	NA	922	C	co	NA	NA	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	<0.02	From top of structure
IIIA	923-IIIA-CS-CS-001	923-CS-001	6/26/2014	NA	NA	923	D	co	NA	NA	<20	<20	<20	<20	1600	2500	1100	--	<20	5200	5.2	Outfall #6, concrete channel
IIIA	923-IIIA-CS-CS-002	923-CS-002	6/26/2014	NA	NA	923	C	co	NA	NA	<20	<20	<20	<20	<20	32	<20	--	<20	32	0.032	Outfall #6, catch basin, exterior sample
IIIA	923-IIIA-CS-CS-003	923-CS-003	6/26/2014	NA	NA	923	C	co	NA	NA	<20	<20	<20	<20	92	250	56	--	<20	398	0.398	Outfall #6, catch basin, exterior sample
IIIA	DC-431	DC-431	6/26/2014	NA	NA	NA	C	co	NA	NA	<20	<20	<20	<20	<20	570	<20	--	<20	570	0.57	Stockpile samples West of Cooling Tower Area/Hot Well Area
IIIA	DC-432	DC-432	6/26/2014	NA	NA	NA	D	co	NA	NA	<20	<20	<20	<20	6200	36000	3100	--	<20	45300	45.3	Concrete stockpile of material west of Structure 293
IIIA	DC-433	DC-433	6/26/2014	NA	NA	NA	D	co	NA	NA	<20	<20	<20	<20	64	120	86	--	--	270	0.27	Concrete stockpile of material west of Structure 293
IV	565-IV-O-CS-001	565-CS-001	2/26/2014	NA	NA	565	C	co	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Concrete stockpile of Structure 565
IV	565-IV-O-CS-002	565-CS-002	2/26/2014	NA	NA	565	C	co	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Concrete stockpile of Structure 565
IV	565-IV-O-CS-003	565-CS-003	2/26/2014	NA	NA	565	C	co	NA	NA	<100	<100	<100	<100	160	150	<100	--	<100	310	0.31	Concrete stockpile of Structure 565
IV	565-IV-O-CS-004	565-CS-004	2/26/2014	NA	NA	565	C	co	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Concrete stockpile of Structure 565
IV	570-IV-P/S-O-001	570-O-001	2/25/2014	NA	NA	570	C	ot	NA	NA	<50	<50	<50	<50	100	<50	120	<50	<50	220	0.22	Gray Material inside structure
IV	570-IV-P/S-CS-001	570-CS-001	2/25/2014	NA	NA	570	C	co	0.2	182.8	<50	<50	<50	<50	52	<50	<50	<50	<50	52	0.052	Outside wall
IV	570-IV-P/S-CS-002	570-CS-002	2/25/2014	NA	NA	570	C	co	1.5	181.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Outside wall black stain (pipe)
IIIA	574-IIIA-P/S-O-001	574-O-001	2/26/2014	NA	NA	574	D	ot	NA	NA	<100	<100	<100	<100	670	990	<1000	--	7600	9260	9.26	Debris sample from interior of structure
IV	575-IV-P/S-CS-001	575-CS-001	3/10/2014	NA	NA	575	C	co	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	NA
IV	576-IIA-P/S-CS-001	576-CS-001	3/10/2014	NA	NA	576	C	co	NA	NA	<50	<50	<50	<50	240	<50	<50	<50	<50	240	0.24	NA
IV	582-IV-P/S-CS-001	582-CS-001	2/27/2014	NA	NA	582	C	co	NA	NA	<49	<49	<49	<49	<49	<49	<49	<49	<49	<49	<0.049	Inner sidewall
IV	582-IV-P/S-CS-002	582-CS-002	2/27/2014	NA	NA	582	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Inner sidewall

TABLE 2

CONCRETE SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082, units in ug/kg, unless otherwise specified

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IV	582-IV-P/S-CS-003	582-CS-003	2/27/2014	NA	NA	582	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Floor, Interior
IV	587-IV-P/S-CS-001	587-CS-001	3/4/2014	NA	NA	587	C	co	NA	NA	<50	<50	<50	<50	180	<50	76	<50	<50	256	0.256	Top of structure
IV	591-IV-P/S-CS-001	591-CS-001	3/4/2014	NA	NA	591	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile of Structure 591 concrete
IV	591-IV-P/S-CS-002	591-CS-002	3/4/2014	NA	NA	591	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile of Structure 591 concrete
IV	591-IV-P/S-CS-003	591-CS-003	3/4/2014	NA	NA	591	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	120	120	0.12	Top of Slab over structure
IV	594-IV-P/S-CS-001	594-CS-001	3/5/2014	NA	NA	594	C	co	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of Structure
IV	594-IV-P/S-CS-002	594-CS-002	3/5/2014	NA	NA	594	C	co	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of Structure
IV	594-IV-P/S-CS-003	594-CS-003	3/5/2014	NA	NA	594	C	co	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of Structure
IV	596-IV-P/S-CS-001	596-CS-001	3/5/2014	NA	NA	596	C	co	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of Structure
IV	596-IV-P/S-CS-002	596-CS-002	3/5/2014	NA	NA	596	C	co	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of Structure
IV	596-IV-P/S-CS-003	596-CS-003	3/5/2014	NA	NA	596	C	co	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of Structure
IV	615-IV-P/S-CS-001	615-CS-001	3/12/2014	NA	NA	615	D	co	NA	NA	<50	<50	<50	<50	140	<50	<50	<50	<50	140	0.14	Black stained; sampled after structure removed
IV	642-IV-P-O-001	642-O-001	3/20/2014	NA	NA	642	D	ot	4.5	178.5	<100	<100	<100	<100	<100	1100	880	--	<100	1980	1.98	Reddish brown sludge
IV	646-IV-P/S-CS-001	646-CS-001	3/24/2014	NA	NA	646	C	co	NA	NA	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Black stained, structure, stockpiled
IV	646-IV-P/S-CS-002	646-CS-002	3/24/2014	NA	NA	646	C	co	NA	NA	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Structure stockpiled
IV	647-IV-P/S-CS-001	647-CS-001	4/1/2014	NA	NA	647	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Inside floor of structure; sampled after structure removed
IV	647-IV-P/S-CS-002	647-CS-002	4/1/2014	NA	NA	647	C	co	NA	NA	<50	<50	<50	<50	230	<50	<50	<50	<50	230	0.23	Inside wall of structure; sampled after strcture removed
IV	647-IV-P/S-CS-003	647-CS-003	4/1/2014	NA	NA	647	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Outside wall of structure; sampled after structure removed
IV	648-IV-P/S-CS-001	648-CS-001	3/25/2014	NA	NA	648	C	co	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Inside wall of pit
IV	648-IV-P/S-CS-002	648-CS-002	3/25/2014	NA	NA	648	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Inside wall of pit
IV	648-IV-P/S-CS-003	648-CS-003	3/25/2014	NA	NA	648	C	co	NA	NA	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Broken edge of structure
IV	648-IV-P/S-O-001	648-O-001	3/25/2014	NA	NA	648	D	ot	NA	NA	<50	<50	<50	<50	<50	800	<50	<50	610	1410	1.41	Black sludge in bottom of structure
IV	658-IV-P/S-CS-001	658-CS-001	3/25/2014	NA	NA	658	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Broken wall piece with black stain
IV	658-IV-P/S-CS-002	658-CS-002	3/25/2014	NA	NA	658	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Concrete chips from structure. 49/50 30' West of Column G
IV	678-IV-P/S-CS-001	678-CS-001	4/1/2014	NA	NA	678	C	co	4	179	<50	<50	<50	<50	110	<50	<50	<50	<50	110	0.11	Top of structure
IV	678-IV-P/S-CS-002	678-CS-002	4/1/2014	NA	NA	678	C	co	6	177	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side wall
IV	696-IV-P/S-CS-001	696-CS-001	4/2/2014	NA	NA	696	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Slurry inside structures; sampled after structure removed
IV	696-IV-P/S-CS-002	696-CS-002	4/2/2014	NA	NA	696	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Slurry inside structures; sampled after structure removed
VI	701-IV-CS-CS-001	701-CS-001	4/3/2014	NA	NA	701	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Concrete block with embedded pipe; sampled after structure removed
IV	705-IV-P/S-CS-001	705-CS-001	4/7/2014	NA	NA	705	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Inside floor of structure; sampled after structure removed
IV	715-IV-P/S-CS-001	715-CS-001	4/9/2014	NA	NA	715	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Outside wall; sampled after structure removed

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IV	715-IV-P/S-CS-002	715-CS-002	4/9/2014	NA	NA	715	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Outside wall; sampled after structure removed
IV	715-IV-P/S-CS-003	715-CS-003	4/16/2014	NA	NA	715	D	co	NA	NA	<500	<500	<500	<500	3200	<500	930	<500	<500	4130	4.13	Pink chips of concrete from internal sump; sampled after structure removed
IV	715-IV-P/S-O-001	715-O-001	4/9/2014	NA	NA	715	D	ot	NA	NA	<490	<490	<490	<490	2100	<490	810	<490	<490	2910	2.91	Black-stained; sampled after structure removed
IV	715-IV-P/S-O-002	715-O-002	4/16/2014	NA	NA	715	D	ot	NA	NA	<5000	<5000	<5000	<5000	24000	<5000	6200	<5000	<5000	30200	30.2	Black oily sludge from internal sump; sampled after structure removed
IV	739-IV-CS-CS-001	739-CS-001	4/17/2014	NA	NA	739	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	739-IV-P/S-CS-001	739-CS-001	4/15/2014	NA	NA	739	C	co	NA	NA	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Outside wall of structure; sampled after structure removed
IV	742-IV-P/S-CS-001	742-CS-001	4/15/2014	NA	NA	742	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Inside wall of structure; sampled after structure removed
IV	742-IV-P/S-CS-002	742-CS-002	4/15/2014	NA	NA	742	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	120	120	0.12	Inside wall of structure; sampled after structure removed
IV	742-IV-P/S-CS-003	742-CS-003	4/15/2014	NA	NA	742	C	co	NA	NA	<50	<50	<50	<50	670	<50	<50	<50	260	930	0.93	Inside wall of structure; sampled after structure removed
IV	742-IV-P/S-O-001	742-O-001	4/15/2014	NA	NA	742	D	ot	NA	NA	<49	<49	<49	<49	440	<49	<49	<49	3200	3640	3.64	Sediment inside structure; sampled after structure removed
IV	748-IV-P/S-CS-001	748-CS-001	4/17/2014	NA	NA	748	C	co	NA	NA	<50	<50	<50	<50	400	<50	<50	<50	<50	400	0.4	Side of structure; sampled after structure removed
IV	748-IV-P/S-CS-002	748-CS-002	4/17/2014	NA	NA	748	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	748-IV-P/S-CS-003	748-CS-003	4/17/2014	NA	NA	748	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	748-IV-P/S-O-001	748-O-001	4/16/2014	NA	NA	748	D	ot	NA	NA	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<0.25	Black oily sludge from on top of structure; sampled after structure removed
IV	754-IV-P/S-CS-001	754-CS-001	4/17/2014	NA	NA	754	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	754-IV-P/S-O-001	754-O-001	4/17/2014	NA	NA	754	C	ot	NA	NA	<50	<50	<50	<50	630	<50	<50	<50	<50	630	0.63	Gray/black sediment inside vault; sampled after structure removed
IV	757-IV-P/S-CS-001	757-CS-001	4/17/2014	NA	NA	757	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure
IV	757-IV-P/S-CS-002	757-CS-002	4/17/2014	NA	NA	757	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure
IV	757-IV-P/S-O-001	757-O-001	4/17/2014	NA	NA	757	D	ot	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	180	180	0.18	Gray/green sediment inside vault; sampled after structure removed
IV	776-IV-CS-CS-001	776-CS-001	4/21/2014	NA	NA	776	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Concrete sample; on side wall; sampled after structure removed
IV	776-IV-CS-CS-002	776-CS-002	4/21/2014	NA	NA	776	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Concrete sample; on side wall; sampled after structure removed
IV	777-IV-P/S-CS-001	777-CS-001	4/21/2014	NA	NA	777	D	co	NA	NA	<50	<50	<50	<50	190	190	<50	<50	<50	380	0.38	Concrete sample inside sump; sampled after structure removed
IV	777-IV-P/S-O-001	777-O-001	4/21/2014	NA	NA	777	D	ot	NA	NA	<500	<500	<500	<500	<500	<500	<500	<500	8100	8100	8.1	Sediment (black) inside sump; sampled after structure removed
IV	778-IV-CS-CS-001	778-CS-001	4/22/2014	NA	NA	778	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Outside wall; sampled after structure removed
IV	778-IV-CS-CS-002	778-CS-002	4/22/2014	NA	NA	778	C	co	NA	NA	<50	<50	<50	<50	120	<50	<50	<50	<50	120	0.12	Outside wall; sampled after structure removed
IV	780-IV-P/S-CS-001	780-CS-001	4/22/2014	NA	NA	780	C	co	NA	NA	<50	<50	<50	<50	52	<50	<50	<50	<50	52	0.052	Inner wall; back staining; sampled after structure removed
IV	784-IV-CS-CS-001	784-CS-001	4/24/2014	NA	NA	784	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Top of structure; sampled after structure removed
IV	785-IV-CS-CS-001	785-CS-001	4/24/2014	NA	NA	785	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Top of structure; sampled after structure removed
IV	786-IV-CS-CS-001	786-CS-001	4/24/2014	NA	NA	786	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Top of structure; sampled after structure removed

TABLE 2

CONCRETE SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082, units in ug/kg, unless otherwise specified

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IV	787-IV-CS-CS-001	787-CS-001	4/24/2014	NA	NA	787	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Top of structure; sampled after structure removed
IV	799-IV-CS-CS-001	799-CS-001	4/28/2014	NA	NA	799	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	799-IV-CS-CS-002	799-CS-002	4/28/2014	NA	NA	799	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	92	92	0.092	Top, inside of structure; sampled after structure removed
IV	799-IV-CS-CS-003	799-CS-003	4/28/2014	NA	NA	799	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Top of structure; sampled after structure removed
IV	799-IV-CS-CS-004	799-CS-004	4/28/2014	NA	NA	799	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	801-IV-P/S-CS-001	801-CS-001	4/28/2014	NA	NA	801	D	co	NA	NA	<50	<50	<50	<50	1500	<50	<50	<50	<50	1500	1.5	Top of structure; sampled after structure removed
IV	801-IV-P/S-CS-002	801-CS-002	4/28/2014	NA	NA	801	C	co	NA	NA	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Side of structure; sampled after structure removed
IV	801-IV-P/S-CS-003	801-CS-003	4/28/2014	NA	NA	801	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	801-IV-P/S-CS-004	801-CS-004	4/28/2014	NA	NA	801	C	co	NA	NA	<50	<50	<50	<50	580	<50	<50	<50	<50	580	0.58	Top of structure; sampled after structure removed
IV	809-IV-P/S-CS-001	809-CS-001	5/1/2014	NA	NA	809	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	809-IV-P/S-CS-002	809-CS-002	5/1/2014	NA	NA	809	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	809-IV-P/S-O-001	809-O-001	5/1/2014	NA	NA	809	C	ot	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Black sediment attached to structure; sampled after structure removed
IV	809-IV-P/S-O-002	809-O-002	5/7/2014	NA	NA	809	C	ot	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Black sediment inside structure; sampled after structure removed
IV	811-IV-CS-CS-001	811-CS-001	5/1/2014	NA	NA	811	C	co	NA	NA	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Side of structure; sampled after structure removed
IV	811-IV-CS-CS-002	811-CS-002	5/1/2014	NA	NA	811	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Side of structure; sampled after structure removed
IV	815-IV-CS-CS-001	815-CS-001	5/1/2014	NA	NA	815	C	co	NA	NA	<50	<50	<50	<50	51J	<50	<50	<50	<50	51	0.051	Side of structure; sampled after structure removed
IV	815-IV-CS-O-001	815--O-001	5/1/2014	NA	NA	815	C	ot	NA	NA	<510	<510	<510	<510	<510	<510	<510	<510	<510	<510	<0.51	Black sediment attached to structure
IV	819-IV-P/S-CS-001	819-CS-001	5/1/2014	NA	NA	819	C	co	NA	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<0.1	Side of structure
IV	820-IV-CS-CS-001	820-CS-001	5/1/2014	NA	NA	820	C	co	NA	NA	<50	<50	<50	<50	97J	<50	84J	<50	<50	181	0.181	Side of structure
IV	821-IV-CS-CS-001	821-CS-001	5/1/2014	NA	NA	821	V	co	NA	NA	<50	<50	<50	<50	69J	<50	<50	<50	<50	69	0.069	Side of structure
IV	827-IV-P/S-CS-001	827-CS-001	5/19/2014	NA	NA	827	C	co	NA	NA	<50	<50	<50	<50	680	<50	<50	<50	<50	680	0.68	Swindell Pit, concrete from stockpile. Broken off from structure.
IV	827-IV-P/S-CS-002	827-CS-002	5/19/2014	NA	NA	827	C	co	NA	NA	<50	<50	<50	<50	360	<50	<50	<50	<50	360	0.36	Swindell Pit, concrete from stockpile. Broken off from structure.
IV	827-IV-P/S-CS-003	827-CS-003	5/27/2014	NA	NA	827	V	co	14	169	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	In place concrete, East sidewall
IV	827-IV-P/S-CS-004	827-CS-004	5/27/2014	NA	NA	827	V	co	14	169	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	In place concrete, Northwest corner
IV	827-IV-P/S-O-001	827-O-001	5/5/2014	NA	NA	827	C	pg	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Pea gravel in swindell pit
IV	827-IV-P/S-O-002	827-O-002	5/27/2014	NA	NA	827	V	pg	14	169	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Pea gravel inside pit, in place
IV	838-IV-P/S-CS-001	838-CS-001	5/8/2014	NA	NA	838	C	co	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Inside of vault - pinkish
IV	849-IV-P/S-CS-001	849-CS-001	5/8/2014	NA	NA	849	D	co	4	179	<50	<50	<50	<50	380	<50	110	<50	<50	490	0.49	Outside wall, structure still in place
IV	849-IV-P/S-O-001	849-O-001	5/7/2014	NA	NA	849	D	ot	NA	NA	<50	<50	<50	<50	580	<50	<50	<50	<50	580	0.58	White & green material inside structure with metal shavings
IV	849-IV-P/S-O-002	849-O-002	5/7/2014	NA	NA	849	D	ot	NA	NA	<500	<500	<500	<500	900	850	<500	<500	<500	1750	1.75	Black sediment inside structure
IV	855-IV-P/S-CS-001	855-CS-001	5/8/2014	NA	NA	855	C	co	3.5	179.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Outside wall

TABLE 2

CONCRETE SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082, units in ug/kg, unless otherwise specified

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IV	855-IV-P/S-O-001	855-O-001	5/8/2014	NA	NA	855	C	ot	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Black sediment inside vault
IV	876-IIIB-O-O-001	876-O-001	5/19/2014	NA	NA	876	D	ot	NA	NA	<50	<50	<50	<50	88	<50	<50UJ	<50	<50	88	0.088	Black material inside structure
IV	DC-415	DC-415	3/24/2014	369	NA	NA	C	co	0.5	182.5	<50	<50	<50	<50	400	<50	140	<50	<50	540	0.54	Black-stained substance near footing, Column C/Row 59
IV	#934	#934	3/24/2014	NA	NA	NA	D	ot	NA	NA	<500	<500	<500	<500	2200	<500	<500	<500	<500	2200	2.2	Black stained substance inside sump
IV	DC-365	DC-365A	11/14/2013	307	NA	NA	C	ot	0.25	182.75	<50	<50	<50	<50	290	<50	<50	<50	400	690	0.69	Black stained concrete slab, Column D/Row 48
IV	DC-365	DC-365B	11/14/2013	307	NA	NA	C	ot	0.5	182.5	<50	<50	<50	<50	180	<50	<50	<50	81	261	0.261	Black stained concrete slab, Column D/Row 48
IV	DC-366	DC-366A	11/14/2013	346	NA	NA	C	ot	0.25	182.75	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Black stained concrete slab, Column D/Row 55
IV	DC-366	DC-366B	11/14/2013	346	NA	NA	C	ot	0.5	182.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Black stained concrete slab, Column D/Row 55
IV	DC-367	DC-367A	11/14/2013	385	NA	NA	C	ot	0.25	182.75	<50	<50	<50	<50	64	<50	<50	<50	150	214	0.214	Black stained concrete slab, Column D/Row 60
IV	DC-367	DC-367B	11/14/2013	385	NA	NA	C	ot	0.5	182.5	<50	<50	<50	<50	220	<50	63	<50	<50	283	0.283	Black stained concrete slab, Column D/Row 60
IV	DC-368	DC-368	11/14/2013	411	NA	NA	C	ot	0.25	182.75	<50	<50	<50	<50	87	<50	<50	<50	170	257	0.257	Black stained concrete slab, Column D/Row 65
IV	PIPE WRAP	NA-40422	4/22/2014	NA	NA	NA	D	mt	4	179	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1	Pipe between rows 66 & 67; resin-like material wrapped around pipe

Abbreviations

co = concrete

pg = pea gravel, rock, etc.

ot = other type of sample

< = not detected at the stated reporting limit

– = not analyzed

NA = not applicable

feet bls = feet below slab

J = estimated value

ug/kg = microgram per kilogram

mg/kg = milligram per kilogram

Pb = lead

TABLE 3

SOIL SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082; units in ug/kg, unless otherwise specified

Phase	Sample Name	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
III	#865	#865	2/25/2014	316	NA	NA	V	so	3.5	179.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Gray soil, hydrocarbon odor
III	#1044	#1044	5/20/2014	NA	6b	NA	V	so	4	179	<50	<50	<50	<50	2700	<50	450	<50	<50	3150	3.15	Soil removal 6b. Verification sample for #1019 removal
III	#1045	#1045	5/20/2014	NA	6b	NA	V	so	8	175	<51	<51	<51	<51	260	<51	66	<51	<51	326	0.326	Soil removal 6b. Verification sample for #1026 removal
III	#1046	#1046	5/20/2014	NA	6b	NA	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Soil removal 6b. Verification sample for #1025 removal
IIIA	#1019	#1019	5/14/2014	NA	6b	NA	E	so	2	181	<50	<50	<50	<50	4900	<50	810	<50	<50	5710	5.71	Verification samples for Soil Removal Area 6b, western sidewall
IIIA	#1020	#1020	5/14/2014	NA	6b	NA	V	so	2	181	<50	<50	<50	<50	310	<50	63	<50	<50	373	0.373	Verification samples for Soil Removal Area 6b, northern sidewall, west end
IIIA	#1021	#1021	5/14/2014	NA	6b	NA	V	so	2	181	<50	<50	<50	<50	190	<50	63	<50	<50	253	0.253	Verification samples for Soil Removal Area 6b, northern sidewall, center
IIIA	#1022	#1022	5/14/2014	NA	6b	NA	V	so	2	181	<50	<50	<50	<50	95	<50	51	<50	<50	146	0.146	Verification samples for Soil Removal Area 6b, northern sidewall, east end
IIIA	#1023	#1023	5/14/2014	NA	6b	NA	V	so	1.5	181.5	<50	<50	<50	<50	410	<50	68	<50	<50	478	0.478	Verification samples for Soil Removal Area 6b, eastern sidewall
IIIA	#1024	#1024	5/14/2014	NA	6b	NA	V	so	2	181	<50	<50	<50	<50	100	<50	<50	<50	<50	100	0.1	Verification samples for Soil removal Area 6b; slope, east end
IIIA	#1025	#1025	5/14/2014	NA	6b	NA	E	so	4	179	<50	<50	<50	<50	7300J	<50	2000J	<50	<50	9300	9.3	Verification samples for Soil removal Area 6b, bottom, east end
IIIA	#1026	#1026	5/14/2014	NA	6b	NA	E	so	4	179	<50	<50	<50	<50	3100	<50	440	<50	<50	3540	3.54	Verification samples for Soil removal Area 6b, bottom, center
IIIA	#1027	#1027	5/14/2014	NA	6b	NA	V	so	4	179	<50	<50	<50	<50	1700J	<50	200J	<50	<50	1900	1.9	Verification samples for Soil removal Area 6b, bottom, west end
IIIA	#1090	#1090	6/3/2014	NA	7	NA	V	so	12	171	<50	<50	<50	<50	110	240	180J	<50	<50	530	0.53	Verification samples for Soil Removal Area 7, bottom, south end
IIIA	#1091	#1091	6/3/2014	NA	7	NA	V	so	12	171	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for Soil Removal Area 7, bottom, center
IIIA	#1092	#1092	6/3/2014	NA	7	NA	V	so	12	171	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for Soil Removal Area 7, bottom, north end
IIIA	#1093	#1093	6/3/2014	NA	7	NA	V	so	11	172	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for Soil Removal Area 7, west sidewall, south end
IIIA	#1094	#1094	6/3/2014	NA	7	NA	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for Soil Removal Area 7, west sidewall, north end
IIIA	#1095	#1095	6/3/2014	NA	7	NA	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for Soil Removal Area 7, north sidewall, center
IIIA	#1096	#1096	6/3/2014	NA	7	NA	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for Soil Removal Area 7, east sidewall, north end
IIIA	#1097	#1097	6/3/2014	NA	7	NA	V	so	10	173	<50	<50	<50	<50	3800	<50	560J	<50	<50	4360	4.36	Verification samples for Soil Removal Area 7, east sidewall, south end
IIIA	#1098	#1098	6/3/2014	NA	7	NA	V	so	12	171	<50	<50	<50	<50	520	450	180J	<50	<50	1150	1.15	Verification samples for Soil Removal Area 7, south sidewall, center

TABLE 3

SOIL SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082; units in ug/kg, unless otherwise specified

Phase	Sample Name	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IIIA	293-IIIA-P/S-SS-001	293-SS-001	5/28/2014	NA	NA	293	E	so	6	177	<50	<50	<50	<50	3600	<50	640J	<50	<50	4240	4.24	Beneath cooling tower side, west end
IIIA	293-IIIA-P/S-SS-002	293-SS-002	5/28/2014	NA	NA	293	E	so	6	177	<50	<50	<50	<50	16000	<50	2200J	<50	<50	18200	18.2	Beneath cooling tower side, center
IIIA	293-IIIA-P/S-SS-003	293-SS-003	5/28/2014	NA	NA	293	E	so	6	177	<50	<50	<50	<50	7100	<50	710J	<50	<50	7810	7.81	Beneath cooling tower side, east end
IIIA	293-IIIA-P/S-SS-004	293-SS-004	5/28/2014	NA	NA	293	V	so	13	170	<51	<51	<51	<51	4700	<51	510J	<51	<51	5210	5.21	Beneath hot well side, odor, southwest corner
IIIA	293-IIIA-P/S-SS-005	293-SS-005	5/28/2014	NA	NA	293	E	so	13	170	<50	<50	<50	<50	22000	<50	1700J	<50	<50	23700	23.7	Beneath hot well side, northwest corner
IIIA	293-IIIA-P/S-SS-006	293-SS-006	5/28/2014	NA	NA	293	V	so	13	170	<50	<50	<50	<50	1700	<50	220J	<50	<50	1920	1.92	Beneath hot well side, northeast corner
IIIA	293-IIIA-P/S-SS-007	293-SS-007	5/28/2014	NA	NA	293	V	so	13	170	<50	<50	<50	<50	13000	<50	1200J	<50	<50	14200	14.2	Beneath hot well side, southeast corner
IIIA	293-IIIA-P/S-SS-008	293-SS-008	5/28/2014	NA	NA	293	E	so	13	170	<50	<50	<50	<50	30000	<50	2400J	<50	<50	32400	32.4	Beneath hot well side, center
IIIA	293-IIIA-P/S-SS-009	293-SS-009	5/28/2014	NA	NA	293	E	so	8	175	<50	<50	<50	<50	3300	<50	330J	<50	<50	3630	3.63	Beneath vault, east of hot well side
IIIA	293-IIIA-P/S-SS-010	293-SS-010	6/2/2014	NA	NA	293	V	so	11	172	<50	<50	<50	<50	89	<50	<50	<50	<50	89	0.089	Verification for SS-009 removal
IIIA	293-IIIA-P/S-SS-011	293-SS-011	6/2/2014	NA	NA	293	V	so	15	168	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Floor sample
IIIA	293-IIIA-P/S-SS-012	293-SS-012	6/2/2014	NA	NA	293	E	so	15	168	<500	<500	<500	<500	29000	<500	2300	<500	<500	31300	31.3	Sidewall
IIIA	293-IIIA-P/S-SS-013	293-SS-013	6/2/2014	NA	NA	293	V	so	15	168	<51	<51	<51	<51	91	<51	<51	<51	<51	91	0.091	Sidewall
IIIA	293-IIIA-P/S-SS-014	293-SS-014	6/2/2014	NA	NA	293	V	so	15	168	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Sidewall
IIIA	293-IIIA-P/S-SS-015	293-SS-015	6/2/2014	NA	NA	293	V	so	15	168	<50	<50	<50	<50	1100	<50	100	<50	<50	1200	1.2	Sidewall
IIIA	293-IIIA-P/S-SS-016	293-SS-016	6/9/2014	NA	NA	293	V	so	15	168	<50	<50	<50	<50	630	<50	60UJ	<50	<50	690	0.69	Verification sample for removal of SS-012, bottom sample
IIIA	293-IIIA-P/S-SS-017	293-SS-017	6/9/2014	NA	NA	293	V	so	14	169	<50	<50	<50	<50	770	<50	57UJ	<50	<50	827	0.827	Verification sample for removal of SS-012, sidewall sample
IIIA	919-IIIA-P/S-SS-001	919-SS-001	6/25/2014	NA	NA	919	V	so	5	178	<50	<50	<50	<50	3100	<50	310J	<50	<50	3410	3.41	Bottom below structure
IIIA	919-IIIA-P/S-SS-002	919-SS-002	6/25/2014	NA	NA	919	V	so	5	178	<50	<50	<50	<50	3600	<50	350J	<50	<50	3950	3.95	Bottom below structure
IIIA	#864	#864	2/25/2014	NA	NA	NA	V	so	3.5	179.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Reddish soil, 85' West of building pad/slab between Rows 53 and 54
IIIA	#1199	#1199	6/26/2014	NA	20	NA	V	so	6	181	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Row 46, piping run west of pad
IIIA	#1200	#1200	6/26/2014	NA	20	NA	V	so	6	181	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Row 47, piping run west of pad
IIIA	#1201	#1201	6/26/2014	NA	20	NA	V	so	6	181	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Row 48, piping run west of pad
IIIA	#1202	#1202	6/26/2014	NA	20	NA	V	so	6	181	<50	<50	<50	<50	290	<50	<50	<50	<50	290	0.29	Row 49, piping run west of pad
IIIA	#1203	#1203	6/26/2014	NA	20	NA	V	so	6	181	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Row 50, piping run west of pad
IIIA	#1204	#1204	6/26/2014	NA	20	NA	V	so	6	181	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Row 51, piping run west of pad
IIIA	#1205	#1205	6/26/2014	NA	20	NA	V	so	6	181	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Row 52, piping run west of pad
IIIA	#1206	#1206	6/26/2014	NA	20	NA	V	so	6	181	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Row 53, piping run west of pad
IIIA	#1222	#1222	7/1/2014	NA	14	NA	V	so	5.5	181.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Area 14, western sidewall
IIIA	#1223	#1223	7/1/2014	NA	14	NA	V	so	4	183	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Area 14, western sidewall
IIIA	#1224	#1224	7/1/2014	NA	14	NA	V	so	5.5	181.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Area 14, eastern sidewall
IIIA	#1225	#1225	7/1/2014	NA	14	NA	V	so	5	182	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Area 14, eastern sidewall
IIIA	#1226	#1226	7/1/2014	NA	14	NA	V	so	6	181	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Area 14, bottom, south end
IIIA	#1227	#1227	7/1/2014	NA	14	NA	V	so	6	181	<50	<50	<50	<50	97	190	<50	<50	<50	287	0.287	Area 14, bottom, north end
IIIA	#1242	#1242	7/7/2014	NA	14	NA	V	so	9	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Area 14 soil removal, deeper sample below #1227
IIIA	W-1	NA-W-001	10/31/2013	NA	NA	NA	E	so	0.5	186.5	<500	<500	<500	<500	10000	<500	4200	<500	<500	14200	14.2	Railroad samples 4' West of fence, UPRR
IIIA	W-2	NA-W-002	10/31/2013	NA	NA	NA	E	so	1.5	185.5	<1000	<1000	<1000	<1000	7600	<1000	3200	<1000	<1000	10800	10.8	Railroad samples 4' West of fence, UPRR

TABLE 3

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Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082; units in ug/kg, unless otherwise specified

Phase	Sample Name	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IIIA	W-24	NA-W-024	4/3/2014	NA	NA	NA	E	so	0.5	186.5	<50	<50	<50	<50	580	<50	630J	<50	<50	1210	1.21	Railroad samples 4' West of fence, UPRR
IIIA	W-25	NA-W-025	4/3/2014	NA	NA	NA	E	so	1	186	<50	<50	<50	<50	560	<50	480J	<50	<50	1040	1.04	Refusal at 1', UPRR
IIIA	W-51	NA-W-051	6/26/2014	NA	NA	NA	E	so	3	184	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	5' North of Row 47, UPRR
IIIA	W-52	NA-W-052	6/26/2014	NA	NA	NA	V	so	3	184	<50	<50	<50	<50	280	<50	<50	<50	<50	280	0.28	Row 48, UPRR
IIIA	W-54	NA-W-054	7/1/2014	NA	NA	NA	E	so	5	182	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Deeper sample at W-51, UPRR
IIIA	W-86	NA-W-086	7/9/2014	NA	NA	NA	V	so	5	182	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification sample for removal of W-51/W-54; slope, UPRR
IIIA	W-87	NA-W-087	7/9/2014	NA	NA	NA	V	so	5	182	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification sample for removal of W-51/W-54; slope, UPRR
IIIA	W-88	NA-W-088	7/9/2014	NA	NA	NA	V	so	6	181	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification sample for removal of W-51/W-54; bottom, UPRR
IIIA	W-89	NA-W-089	7/9/2014	NA	NA	NA	E	so	6	181	<50	<50	<50	<50	650	<50	<50	<50	<50	650	0.65	Verification sample for removal of W-51/W-54; bottom, UPRR
IV	#833	#833	2/20/2014	A/P	NA	NA	V	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile from H60
IV	43-V-R/R-SS-002	43-SS-002	9/25/2013	NA	NA	43	V/E	so	0.5	186.5	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	<0.02	Below grade in rail line E, Row 49
IV	43-V-R/R-SS-003	43-SS-003	9/25/2013	NA	NA	43	V	so	2	185	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	<0.02	Below grade in rail line, Row 49
IV	43-V-R/R-SS-004	43-SS-004	9/25/2013	NA	NA	43	V/E	so	1	186	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	<0.02	Below grade in rail line, between Rows 46 & 47
IV	43-V-R/R-SS-005	43-SS-005	9/25/2013	NA	NA	43	V	so	2	185	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	<0.02	Below grade in rail line, between Rows 46 & 47
IV	562-IV-F/F-SS-001	562-SS-001	2/24/2014	NA	NA	562	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Bottom
IV	562-IV-F/F-SS-002	562-SS-002	2/24/2014	385	NA	562	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	562-IV-F/F-SS-003	562-SS-003	2/24/2014	385	NA	562	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	562-IV-F/F-SS-004	562-SS-004	2/24/2014	372	NA	562	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	562-IV-F/F-SS-005	562-SS-005	2/24/2014	372	NA	562	E	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	562-IV-F/F-SS-006	562-SS-006	2/24/2014	372	NA	562	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	East sidewall
IV	562-IV-F/F-SS-007	562-SS-007	2/24/2014	372	NA	562	V	so	5	178	<50	<50	<50	<50	95	140	<50	<50	<50	235	0.235	East sidewall
IV	562-IV-F/F-SS-008	562-SS-008	2/24/2014	372	NA	562	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	North sidewall
IV	562-IV-F/F-SS-009	562-SS-009	2/24/2014	372	NA	562	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	North sidewall
IV	562-IV-F/F-SS-010	562-SS-010	3/11/2014	372	NA	562	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Removal area
IV	562-IV-F/F-SS-011	562-SS-011	3/11/2014	372	NA	562	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Removal area
IV	563-IV-F/F-SS-001	563-SS-001	2/24/2014	NA	NA	563	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Bottom
IV	563-IV-F/F-SS-002	563-SS-002	2/24/2014	372	NA	563	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	563-IV-F/F-SS-003	563-SS-003	2/24/2014	372	NA	563	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	563-IV-F/F-SS-004	563-SS-004	2/24/2014	359	NA	563	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	563-IV-F/F-SS-005	563-SS-005	2/24/2014	359	NA	563	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	563-IV-F/F-SS-006	563-SS-006	2/24/2014	359	NA	563	V	so	3	180	<50	<50	<50	<50	270	<50	<50	<50	<50	270	0.27	North sidewall
IV	563-IV-F/F-SS-007	563-SS-007	2/24/2014	359	NA	563	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	North sidewall
IV	563-IV-F/F-SS-008	563-SS-008	2/24/2014	359	NA	563	E	so	3	180	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<0.5	East sidewall
IV	563-IV-F/F-SS-009	563-SS-009	2/24/2014	359	NA	563	V	so	5	178	<50	<50	<50	<50	290	<50	<50	<50	<50	290	0.29	East sidewall

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IV	563-IV-F/F-SS-010	563-SS-010	3/6/2014	359	NA	563	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification sample for soil removal for SS-008
IV	563-IV-F/F-SS-011	563-SS-011	3/6/2014	359	NA	563	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification sample for soil removal for SS-008
IV	564-IV-F/F-SS-001	564-SS-001	2/24/2014	NA	NA	564	E	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Bottom
IV	564-IV-F/F-SS-002	564-SS-002	2/24/2014	346	NA	564	V	so	3	180	<50	<50	<50	<50	76	<50	<50	<50	<50	76	0.076	East sidewall
IV	564-IV-F/F-SS-003	564-SS-003	2/24/2014	346	NA	564	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	East sidewall
IV	564-IV-F/F-SS-004	564-SS-004	2/24/2014	359	NA	564	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	564-IV-F/F-SS-005	564-SS-005	2/24/2014	359	NA	564	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	564-IV-F/F-SS-006	564-SS-006	2/24/2014	346	NA	564	V	so	3	180	<50	<50	<50	<50	360	<50	<50	<50	<50	360	0.36	West sidewall
IV	564-IV-F/F-SS-007	564-SS-007	2/24/2014	346	NA	564	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	564-IV-F/F-SS-008	564-SS-008	2/24/2014	NA	NA	564	V	so	3	180	<50	<50	<50	<50	55	<50	<50	<50	<50	55	0.055	North sidewall
IV	564-IV-F/F-SS-009	564-SS-009	2/24/2014	346	NA	564	V	so	5	178	<50	<50	<50	<50	67	<50	<50	<50	<50	67	0.067	North sidewall
IV	564-IV-F/F-SS-010	564-SS-010	3/6/2014	NA	NA	564	V	so	13	170	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification sample for soil removal at 564-IV-F/F-SS-001
IV	#931	#931	3/20/2014	346	NA	564	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for soil removal at #849, east sidewall
IV	566-IV-F/F-SS-001	566-SS-001	2/24/2014	383	NA	566	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	566-IV-F/F-SS-002	566-SS-002	2/24/2014	384	NA	566	V	so	5	178	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<0.5	South sidewall
IV	566-IV-F/F-SS-003	566-SS-003	2/24/2014	NA	NA	566	V	so	10	173	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<0.5	South Wall
IV	566-IV-F/F-SS-004	566-SS-004	2/24/2014	370	NA	566	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	566-IV-F/F-SS-005	566-SS-005	2/24/2014	370	NA	566	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	566-IV-F/F-SS-006	566-SS-006	2/24/2014	371	NA	566	V	so	3	180	<50	<50	<50	<50	180	<50	<50	<50	<50	180	0.18	East sidewall
IV	566-IV-F/F-SS-007	566-SS-007	2/24/2014	371	NA	566	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	East sidewall
IV	566-IV-F/F-SS-008	566-SS-008	2/24/2014	370	NA	566	V	so	3	180	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<0.5	North sidewall
IV	566-IV-F/F-SS-009	566-SS-009	2/24/2014	371	NA	566	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	North sidewall
IV	567-IV-F/F-SS-001	567-SS-001	2/24/2014	345	NA	567	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Bottom
IV	567-IV-F/F-SS-002	567-SS-002	2/24/2014	344	NA	567	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	567-IV-F/F-SS-003	567-SS-003	2/24/2014	344	NA	567	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	North sidewall
IV	567-IV-F/F-SS-004	567-SS-004	2/24/2014	344	NA	567	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall
IV	567-IV-F/F-SS-005	567-SS-005	2/24/2014	345	NA	567	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	East sidewall
IV	567-IV-F/F-SS-006	567-SS-006	2/24/2014	345	NA	567	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	East sidewall
IV	567-IV-F/F-SS-007	567-SS-007	2/24/2014	344	NA	567	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	567-IV-F/F-SS-008	567-SS-008	2/24/2014	345	NA	567	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	567-IV-F/F-SS-009	567-SS-009	2/24/2014	345	NA	567	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	North sidewall
IV	568-IV-F/F-SS-001	568-SS-001	2/24/2014	NA	NA	568	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Bottom
IV	568-IV-F/F-SS-002	568-SS-002	2/24/2014	357	NA	568	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	West sidewall

TABLE 3

SOIL SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082; units in ug/kg, unless otherwise specified

Phase	Sample Name	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IV	568-IV-F/F-SS-003	568-SS-003	2/24/2014	357	NA	568	V	so	5	178	<50	<50	<50	<50	52	<50	<50	<50	<50	52	0.052	West sidewall
IV	568-IV-F/F-SS-004	568-SS-004	2/24/2014	357	NA	568	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	North sidewall
IV	568-IV-F/F-SS-005	568-SS-005	2/24/2014	358	NA	568	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	North sidewall
IV	568-IV-F/F-SS-006	568-SS-006	2/24/2014	371	NA	568	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	South sidewall
IV	568-IV-F/F-SS-007	568-SS-007	2/24/2014	371	NA	568	V	so	5	178	<50	<50	<50	<50	64	<50	<50	<50	<50	64	0.064	South sidewall
IV	568-IV-F/F-SS-008	568-SS-008	2/24/2014	358	NA	568	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	East sidewall
IV	568-IV-F/F-SS-009	568-SS-009	2/24/2014	358	NA	568	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	East sidewall
IV	570-IIIA-P/S-SS-001	570-SS-001	3/10/2014	NA	NA	570	V	so	13	170	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Soil sample below structure
IV	576-IV-P/S-SS-001	576-SS-001	3/13/2014	NA	NA	576	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	NA
IV	580-IV-F/F-SS-001	580-SS-001	3/5/2014	NA	NA	580	E	so	7	176	<50	<50	<50	<50	86	<50	<50	<50	<50	86	0.086	Column C/Row 49 footing, east sidewall
IV	580-IV-F/F-SS-002	580-SS-002	3/5/2014	NA	NA	580	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Column C/Row 49 footing, floor
IV	580-IV-F/F-SS-003	580-SS-003	3/5/2014	NA	NA	580	D	so	NA	NA	<50	<50	<50	<50	160	<50	<50	<50	<50	160	0.16	Stockpile, dark gray and stained
IV	587-IV-P/S-SS-001	587-SS-001	3/10/2014	NA	NA	587	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	66	66	0.066	Below approximate location of structure
IV	591-IV-P/S-SS-001	591-SS-001	3/10/2014	NA	NA	591	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Below approximate location of structure
IV	#869	#869	3/4/2014	NA	NA	594	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for #849 removal, floor
IV	#870	#870	3/4/2014	NA	NA	594	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for #849 removal sidewall, east sidewall
IV	615-IV-P/S-O-001	615-O-001	3/11/2014	NA	NA	615	D	so	NA	NA	<50	<50	<50	<50	520	<50	<50	<50	70	590	0.59	Oily material and metal shavings inside structure
IV	615-IV-P/S-SS-001	615-SS-001	3/11/2014	358	NA	615	V	so	7	176	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Soil Removal, west sidewall
IV	615-IV-P/S-SS-002	615-SS-002	3/11/2014	359	NA	615	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Soil Removal, bottom, west
IV	615-IV-P/S-SS-003	615-SS-003	3/11/2014	359	NA	615	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Soil Removal, bottom, west
IV	615-IV-P/S-SS-004	615-SS-004	3/11/2014	359	NA	615	V	so	7	176	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Gray, hydrocarbon odor, soil removal, east sidewall
IV	642-IV-P-SS-001	642-SS-001	3/20/2014	NA	NA	642	V	so	4.5	178.5	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Beneath pipe
IV	642-IV-P-SS-002	642-SS-002	3/20/2014	NA	NA	642	V	so	4.5	178.5	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Beneath pipe
IV	642-IV-P-SS-003	642-SS-003	3/20/2014	NA	NA	642	V	so	4	179	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Beneath pipe
IV	642-IV-P-SS-004	642-SS-004	3/20/2014	NA	NA	642	V	so	4	179	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Beneath pipe
IV	642-IV-P-SS-005	642-SS-005	3/20/2014	NA	NA	642	V	so	4	179	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Beneath pipe
IV	642-IV-P-SS-006	642-SS-006	3/20/2014	NA	NA	642	V	so	4	179	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Beneath pipe
IV	642-IV-P-SS-007	642-SS-007	3/25/2014	NA	NA	642	V	so	9	174	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Confirmation sample
IV	647-IV-P/S-SS-001	647-SS-001	4/7/2014	NA	NA	647	V	so	4	179	<50	<50	<50	<50	72	<50	<50	<50	<50	72	0.072	Sample under structure
IV	647-IV-P/S-SS-002	647-SS-002	4/7/2014	NA	NA	647	V	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Sample under structure
IV	647-IV-P/S-SS-003	647-SS-003	4/10/2014	NA	NA	647	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Deeper sample at SS-001 location
IV	648-IV-P/S-SS-001	648-SS-001	3/31/2014	NA	NA	648	V	so	4	179	<49	<49	<49	<49	<49	<49	<49	<49	<49	<49	<0.049	Under structure
IV	658-IV-P/S-SS-001	658-SS-001	3/25/2014	NA	NA	658	V	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Gray soil attached to structure

TABLE 3

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Vernon, California

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Phase	Sample Name	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IV	676-IV-R/R-SS-001	676-SS-001	3/31/2014	NA	NA	676	V	so	3.5	179.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Rail bed under ballast, 10' North of Row 52
IV	676-IV-R/R-SS-002	676-SS-002	3/31/2014	NA	NA	676	V	so	3.5	179.5	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Rail bed under ballast, Row 54
IV	676-IV-R/R-SS-003	676-SS-003	3/31/2014	NA	NA	676	V	so	3.5	179.5	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Rail bed under ballast, 10' South of Row 56
IV	676-IV-R/R-SS-004	676-SS-004	3/31/2014	NA	NA	676	V	so	3.5	179.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Rail bed under ballast, 15' North of Row 60
IV	#949	#949	3/31/2014	351	NA	676	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beige asphalt/brick, Row 53, 30' West of Col. G
IV	678-IV-P/S-SS-001	678-SS-001	4/7/2014	NA	NA	678	V	so	7	176	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Sample under structure
IV	696-IV-P/S-SS-001	696-SS-001	4/2/2014	NA	NA	696	D	so	0	183	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Black, hydrocarbon odor
IV	696-IV-P/S-SS-002	696-SS-002	4/2/2014	NA	NA	696	D	so	0	183	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Black, hydrocarbon odor
IV	696-IV-P/S-SS-003	696-SS-003	4/9/2014	NA	NA	696	V	so	8	175	<50	<50	<50	<50	98	<50	<50uj	<50	52	150	0.15	Sample under structure, north end
IV	696-IV-P/S-SS-004	696-SS-004	4/9/2014	NA	NA	696	V	so	8	175	<50	<50	<50	<50	<50	<50	<50uj	<50	<50	<50	<0.05	Sample under structure, middle
IV	696-IV-P/S-SS-005	696-SS-005	4/9/2014	NA	NA	696	V	so	8	175	<51	<51	<51	<51	270	<51	93j	<51	<51	363	0.363	Sample under structure, west end
IV	696-IV-P/S-SS-006	696-SS-006	4/14/2014	NA	NA	696	V	so	10	173	<50	<50	<50	<50	160	<50	<50	<50	<50	160	0.16	Deeper sample below SS-005
IV	696-IV-P/S-SS-007	696-SS-007	4/14/2014	NA	NA	696	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Deeper sample below SS-003
IV	696-IV-P/S-SS-008	696-SS-008	4/21/2014	NA	NA	696	V	so	12	171	<50	<50	<50	<50	58	<50	<50	<50	<50	58	0.058	Deeper sample below SS-007
IV	696-IV-P/S-SS-009	696-SS-009	4/21/2014	NA	NA	696	V	so	12	171	<50	<50	<50	<50	130	<50	<50	<50	<50	130	0.13	Deeper sample below SS-006
IV	739-IV-CS-SS-001	739-SS-001	4/17/2014	NA	NA	739	V	so	7	176	<50	<50	<50	<50	71	<50	<50	<50	<50	71	0.071	Collected below structure footprint
IV	739-IV-CS-SS-002	739-SS-002	4/24/2014	NA	NA	739	V	so	11	172	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath SS-001
IV	742-IV-P/S-SS-001	742-SS-001	4/17/2014	NA	NA	742	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Collected below structure footprint
IV	748-IV-P/S-SS-001	748-SS-001	4/17/2014	NA	NA	748	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Collected below structure footprint
IV	748-IV-P/S-SS-002	748-SS-002	4/17/2014	NA	NA	748	V	so	9	174	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Collected below structure footprint, west end
IV	755-IV-F/F-SS-001	755-SS-001	4/17/2014	NA	NA	755	V	so	NA	NA	<51	<51	<51	<51	85	<51	<51	<51	<51	85	0.085	Soil stuck to footing
IV	755-IV-F/F-SS-002	755-SS-002	6/5/2014	NA	NA	755	V	so	11	172	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	NA
IV	757-IV-P/S-SS-001	757-SS-001	4/17/2014	NA	NA	757	V	so	6	177	<50	<50	<50	<50	68	<50	<50	<50	<50	68	0.068	Collected below structure footprint, southeast end
IV	757-IV-P/S-SS-002	757-SS-002	4/17/2014	NA	NA	757	V	so	6	177	<50	<50	<50	<50	65	<50	<50	<50	<50	65	0.065	Collected below structure footprint, southwest end
IV	757-IV-P/S-SS-003	757-SS-003	4/17/2014	NA	NA	757	V	so	6	177	<50	<50	<50	<50	61	<50	<50	<50	<50	61	0.061	Collected below structure footprint, north end
IV	757-IV-P/S-SS-004	757-SS-004	4/24/2014	NA	NA	757	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath SS-001
IV	757-IV-P/S-SS-005	757-SS-005	4/24/2014	NA	NA	757	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath SS-002
IV	757-IV-P/S-SS-006	757-SS-006	4/24/2014	NA	NA	757	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath SS-003
IV	777-IV-P/S-SS-001	777-SS-001	5/5/2014	NA	NA	777	V	so	5	178	<51	<51	<51	<51	97	<51	59	<51	<51	156	0.156	Beneath structure footprint
IV	777-IV-P/S-SS-002	777-SS-002	5/12/2014	NA	NA	777	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	NA
IV	799-IV-CS-SS-001	799-SS-001	5/7/2014	407	NA	799	V	so	7	176	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure footprint, south, center
IV	799-IV-CS-SS-002	799-SS-002	5/7/2014	407	NA	799	V	so	7	176	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure footprint, northwest end
IV	799-IV-CS-SS-003	799-SS-003	5/7/2014	NA	NA	799	V	so	7	176	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure footprint, south, center
IV	799-IV-CS-SS-004	799-SS-004	5/7/2014	408	NA	799	V	so	7	176	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure footprint, north, center
IV	799-IV-CS-SS-005	799-SS-005	5/7/2014	NA	NA	799	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure footprint, east, center
IV	801-IV-P/S-SS-001	801-SS-001	5/13/2014	NA	NA	801	V	so	6	177	<50	<50	<50	<50	79	<50	<50	<50	<50	79	0.079	Beneath structure footprint, center
IV	801-IV-P/S-SS-002	801-SS-002	5/19/2014	NA	NA	801	V	so	9	174	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Deeper sample below SS-001
IV	802-IV-O-SS-001	802-SS-001	4/24/2014	NA	NA	802	V	so	4	179	<50	<50	<50	<50	91	<50	<50	<50	<50	91	0.091	Beneath smaller diameter pipe
IV	802-IV-O-SS-002	802-SS-002	4/24/2014	NA	NA	802	V	so	4	179	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Beneath larger diameter pipe

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IV	802-IV-O-SS-003	802-SS-003	4/24/2014	NA	NA	802	V	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath larger diameter pipe
IV	802-IV-O-SS-004	802-SS-004	4/24/2014	NA	NA	802	V	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath larger diameter pipe
IV	802-IV-O-SS-005	802-SS-005	4/29/2014	NA	NA	802	V	so	9	174	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Deeper sample beneath SS-001
IV	815-IV-CS-SS-001	815-SS-001	5/7/2014	NA	NA	815	V	so	8	175	<50	<50	<50	<50	54	<50	<50	<50	<50	54	0.054	beneath structure footprint
IV	815-IV-CS-SS-002	815-SS-002	5/12/2014	NA	NA	815	V	so	11	172	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	NA
IV	820-IV-CS-SS-001	820-SS-001	5/1/2014	NA	NA	820	V	so	9	174	<50	<50	<50	<50	190J	<50	61J	<50	<50	251	0.251	Beneath structure
IV	821-IV-CS-SS-001	821-SS-001	5/1/2014	NA	NA	821	C	so	9	174	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure
IV	849-IV-P/S-SS-001	849-SS-001	5/13/2014	NA	NA	849	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure footprint, north end
IV	849-IV-P/S-SS-002	849-SS-002	5/13/2014	358	NA	849	V	so	8	175	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure footprint, south end
IV	876-IIIB-O-SS-001	876-SS-001	5/28/2014	NA	NA	876	V	so	6	177	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Beneath structure
IV	#834	#834	2/20/2014	384	NA	NA	V	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile sample, Light brown/rusty, Row 60 /10' East of Column H
IV	#835	#835	2/20/2014	NA	NA	NA	E	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile from Column H/Row 60
IV	#836	#836	2/21/2014	330	NA	NA	V	so	2.5	180.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#837	#837	2/21/2014	331	NA	NA	V	so	2.5	180.5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#838	#838	2/21/2014	344	NA	NA	V	so	2.75	180.25	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#839	#839	2/21/2014	343	NA	NA	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#840	#840	2/21/2014	344	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#841	#841	2/21/2014	343	NA	NA	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#842	#842	2/21/2014	357	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#843	#843	2/21/2014	357	NA	NA	V	so	3	180	<50	<50	<50	<50	540	<50	250	<50	87	877	0.877	Verification for potential reuse onsite
IV	#844	#844	2/21/2014	357	NA	NA	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#845	#845	2/21/2014	370	NA	NA	V	so	3	180	<50	<50	<50	<50	71	<50	<50	<50	<50	71	0.071	Verification for potential reuse onsite
IV	#846	#846	2/21/2014	356	NA	NA	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#847	#847	2/21/2014	390	NA	NA	V	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#848	#848	2/21/2014	370	NA	NA	V	so	3	180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#849	#849	2/21/2014	369	NA	NA	E	so	3	180	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<0.5	Verification for potential reuse onsite
IV	#850	#850	2/21/2014	369	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#851	#851	2/21/2014	356	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#852	#852	2/21/2014	343	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#853	#853	2/21/2014	331	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for potential reuse onsite
IV	#866	#866	2/26/2014	NA	NA	NA	E	so	1	182	<50	<50	<50	<50	120	<50	<50	<50	<50	120	0.12	Gray soil, adjacent Column C/Row 49, east sidewall
IV	#898	#898	3/6/2014	359	NA	NA	E	so	6	177	<50	<50	<50	<50	1300	<50	120	<50	<50	1420	1.42	North of Structure 563 excavation, gray soil under pad
IV	#927	#927	3/20/2014	NA	NA	NA	D	so	0	183	<5000	<5000	<5000	<5000	78000	<5000	6800	<5000	<5000	84800	84.8	Stockpile from structure removal, west side, north end
IV	#927	#927-2	3/20/2014	NA	NA	NA	D	so	0	183	<5000	<5000	<5000	<5000	190000	<5000	13000	<5000	<5000	203000	203	Stockpile from structure removal, west side, north end
IV	#928	#928	3/20/2014	369	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification for soil removal at #849, east sidewall

TABLE 3

SOIL SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082; units in ug/kg, unless otherwise specified

Phase	Sample Name	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IV	#929	#929	3/20/2014	369	NA	NA	V	so	6	177	<49	<49	<49	<49	<49	<49	<49	<49	<49	<49	<0.049	Verification for soil removal at #849, east sidewall
IV	#930	#930	3/20/2014	369	NA	NA	V	so	5	178	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Verification for soil removal at #849, east sidewall
IV	#932	#932	3/25/2014	304	NA	NA	V	so	8	175	<49	<49	<49	<49	<49	<49	<49	<49	<49	<49	<0.049	Hydrocarbon area removal area, footing at Column C/Row 49
IV	#933	#933	3/25/2014	304	NA	NA	V	so	5	178	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Hydrocarbon area removal area, footing at Column C/Row 49
IV	#935	#935	3/24/2014	487	NA	NA	V	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	10' South of Column G/Row 63; browninsh red soil
IV	#992	#992	4/28/2014	NA	9a,b,d	NA	D	so	NA	NA	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#993	#993	4/28/2014	NA	9a,b,d	NA	V	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#994	#994	4/28/2014	NA	9a,b,d	NA	V	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	73	73	0.073	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#995	#995	4/28/2014	NA	9a,b,d	NA	V	so	NA	NA	<50	<50	<50	<50	230	<50	<50	<50	<50	230	0.23	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#996	#996	4/28/2014	NA	9a,b,d	NA	V	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#997	#997	4/28/2014	NA	9a,b,d	NA	D	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#1005	#1005	4/29/2014	NA	NA	NA	V	so	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1006	#1006	4/29/2014	NA	NA	NA	V	so	NA	NA	<100	<100	<100	<100	100	140	<100	--	<100	240	0.24	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1007	#1007	4/29/2014	NA	NA	NA	V	so	NA	NA	<100	<100	<100	<100	120	140	<100	--	<100	260	0.26	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1008	#1008	4/29/2014	NA	NA	NA	V	so	NA	NA	<100	<100	<100	<100	160	200	<100	--	<100	360	0.36	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1009	#1009	4/29/2014	NA	NA	NA	D	so	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1010	#1010	4/29/2014	NA	NA	NA	D	so	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1011	#1011	4/29/2014	NA	NA	NA	D	so	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1012	#1012	4/29/2014	NA	NA	NA	D	so	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1013	#1013	4/29/2014	NA	NA	NA	D	so	NA	NA	<100	<100	<100	<100	210	<100	<100	--	<100	210	0.21	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1014	#1014	4/29/2014	NA	NA	NA	V	so	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1015	#1015	4/29/2014	NA	NA	NA	D	so	NA	NA	<100	<100	<100	<100	<100	<100	<100	--	<100	<100	<0.1	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1016	#1016	5/5/2014	305	NA	NA	D	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Between Columns C and H at Row 47; pinkish, fibrous soil, below slab

TABLE 3

SOIL SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082; units in ug/kg, unless otherwise specified

Phase	Sample Name	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
IV	#1017	#1017	5/7/2014	307	NA	NA	V	so	1	182	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Column D/Row 47; reddish-brown soil encountered during foundation/footing removal
IV	#1018	#1018	5/13/2014	NA	NA	NA	D	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile sample. Between Columns F and G, stockpile of Cu-impacted debris layer, near Row 53
IV	#1028	#1028	5/14/2014	NA	NA	NA	D	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	56	56	0.056	TPH stockpiles; South end of stockpile between Rows 63 & 67 after removing south end
IV	#1029	#1029	5/14/2014	NA	NA	NA	D	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	88	88	0.088	TPH stockpiles; South end of stockpile between Rows 63 & 67 after removing south end
IV	#1030	#1030	5/14/2014	NA	NA	NA	D	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	TPH stockpiles; South end of stockpile between Rows 63 & 67 after removing south end
IV	#1031	#1031	5/14/2014	NA	NA	NA	D	so	NA	NA	<50	<50	<50	<50	150	<50	110	<50	<50	260	0.26	TPH stockpiles; East end of stockpile after removing east end; stockpile near Row 65 and Column C
IV	#1032	#1032	5/14/2014	NA	NA	NA	V	so	NA	NA	<50	<50	<50	<50	1700	<50	190	<50	<50	1890	1.89	TPH stockpiles; East end of stockpile after removing east end; stockpile near Row 65 and Column C
IV	#1033	#1033	5/14/2014	NA	NA	NA	D	so	NA	NA	<50	<50	<50	<50	150	<50	400	<50	<50	550	0.55	TPH stockpiles; East end of stockpile after removing east end; stockpile near Row 65 and Column C
IV	#1034	#1034	5/14/2014	NA	NA	NA	D	so	NA	NA	<50	<50	<50	<50	250	<50	85	<50	<50	335	0.335	TPH stockpiles; East end of stockpile after removing east end; stockpile near Row 65 and Column C
IV	#1122	#1122	6/5/2014	396	9d	NA	V	so	10	173	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Area 9d, area of soil removals became 10' deep due to footings removed immediately adjacent to Area 9a, 9b, 9d beneath structure
IV	#867	#867	3/4/2014	369	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for #849 removal sidewall, east sidewall
IV	#868	#868	3/4/2014	369	NA	NA	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Verification samples for #849 removal, floor
VI	885-IV-R/R-SS-001	885-SS-001	5/21/2014	NA	NA	885	E	so	4	179	<50	<50	<50	<50	61	<50	<50	<50	<50	61	0.061	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-002	885-SS-002	5/21/2014	NA	NA	885	V	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-003	885-SS-003	5/21/2014	NA	NA	885	V	so	4	179	<50	<50	<50	<50	510	<50	430	<50	85	1025	1.025	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-004	885-SS-004	5/21/2014	NA	NA	885	V	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-005	885-SS-005	5/21/2014	NA	NA	885	V	so	4	179	<50	<50	<50	<50	<50	<50	61	<50	<50	61	0.061	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-006	885-SS-006	5/21/2014	NA	NA	885	V	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-007	885-SS-007	5/21/2014	NA	NA	885	E	so	4	179	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-008	885-SS-008	5/29/2014	NA	NA	885	V	so	5	178	<51	<51	<51	<51	<51	<51	<51	<51	<51	<51	<0.051	At SS-001, deeper
VI	885-IV-R/R-SS-009	885-SS-009	5/29/2014	NA	NA	885	V	so	6	177	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	At SS-001, deeper

TABLE 3

SOIL SAMPLE RESULTS - PCBs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8082; units in ug/kg, unless otherwise specified

Phase	Sample Name	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (approx. MSL)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	PCB 1262	PCB 1268	Total PCBs (ug/kg)	Total PCBs (mg/kg)	Remarks
VI	885-IV-R/R-SS-012	885-SS-012	5/29/2014	NA	NA	885	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	At SS-003, deeper
VI	885-IV-R/R-SS-013	885-SS-013	5/29/2014	NA	NA	885	V	so	6	177	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	At SS-003, deeper
VI	885-IV-R/R-SS-016	885-SS-016	5/29/2014	NA	NA	885	V	so	5	178	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	At SS-005, deeper
VI	885-IV-R/R-SS-017	885-SS-017	5/29/2014	NA	NA	885	V	so	6	177	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	At SS-005, deeper
VI	#990	#990	4/28/2014	NA	9a,b,d	NA	D	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile samples - stockpile soil associated with structure removal in Areas 9a, 9b, 9d
VI	#991	#991	4/28/2014	NA	9a,b,d	NA	D	so	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<0.05	Stockpile samples - stockpile soil associated with structure removal in Areas 9a, 9b, 9d

Abbreviations

so = soil
< = not detected at the stated reporting limit
-- = not analyzed
NA = not applicable
feet bls = feet below slab
ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
J = estimated concentration
UJ = analyte was not detected at a level greater than or equal to the adjusted reporting limit; reporting limit is approximate
BTOS = below top of slab
E = excavated
V = verification sample
V/E = verification sample but excavated
D = disposed
approx. MSL = approximately mean sea level

TABLE 4

SOIL SAMPLE RESULTS - TPH

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8015 Modified[1], units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	TPH - as gasoline	TPH as diesel	TPH as motor oil	TPH total	Remarks	Location Remarks
III	#865	#865	2/25/2014	316	NA	NA	so	V	3.5	179.5	<5	<5	<5	16	Gray soil, hydrocarbon odor	NA
IIIA	293-IV-P/S-O-003	293-O-003	5/8/2014	NA	NA	293	ot	D	6	177	<4.9	185	1322	1500	Sludge sample (black) from pit, South of Cooling Tower area	NA
IIIA	574-IIIA-P/S-O-001	574-O-001	2/26/2014	NA	NA	574	ot	D	NA	NA	12.2	838	786	1600	Debris sample from interior of structure	NA
IIIA	#1090	#1090	6/3/2014	NA	7	NA	so	V	12	171	<5.1	18.5	103	130	Verification samples for Soil Removal Area 7	Bottom, South end
IIIA	#1091	#1091	6/3/2014	NA	7	NA	so	V	12	171	<4.9	<4.9	<4.9	<5	Verification samples for Soil Removal Area 7	Bottom, Center
IIIA	#1092	#1092	6/3/2014	NA	7	NA	so	V	12	171	<5	<5	<5	<5	Verification samples for Soil Removal Area 7	Bottom, North end
IIIA	#1093	#1093	6/3/2014	NA	7	NA	so	V	11	172	<5	<5	13.8	24	Verification samples for Soil Removal Area 7	West sidewall, South end
IIIA	#1094	#1094	6/3/2014	NA	7	NA	so	V	10	173	<5	<5	<5	<5	Verification samples for Soil Removal Area 7	West sidewall, North end
IIIA	#1095	#1095	6/3/2014	NA	7	NA	so	V	10	173	<4.9	<4.9	<4.9	<5	Verification samples for Soil Removal Area 7	North sidewall, Center
IIIA	#1096	#1096	6/3/2014	NA	7	NA	so	V	10	173	<5	<5	<5	<5	Verification samples for Soil Removal Area 7	East sidewall, North end
IIIA	#1097	#1097	6/3/2014	NA	7	NA	so	V	10	173	<25	<25	196	260	Verification samples for Soil Removal Area 7	East sidewall, South end
IIIA	#1098	#1098	6/3/2014	NA	7	NA	so	V	12	171	<5	30.7	224	260	Verification samples for Soil Removal Area 7	South sidewall, Center
IV	43-V-R/R-SS-002	43-SS-002	9/25/2013	NA	NA	43	so	V/E	0.5	186.5	<1	<1	<1	<10	Below grade in rail line, Row 49	NA
IV	43-V-R/R-SS-003	43-SS-003	9/25/2013	NA	NA	43	so	V	2	185	<1	<1	<1	<10	Below grade in rail line, row 49	NA
IV	43-V-R/R-SS-004	43-SS-004	9/25/2013	NA	NA	43	so	V/E	1	186	<1	<1	<1	<10	Below grade in rail line, between Rows 46 & 47	NA
IV	43-V-R/R-SS-005	43-SS-005	9/25/2013	NA	NA	43	so	V	2	185	<1	<1	<1	<10	Below grade in rail line, between Rows 46 & 47	NA
IV	562-IV-F/F-SS-001	562-SS-001	2/24/2014	NA	NA	562	so	V	10	173	<5	<5	<5	<5	NA	Bottom
IV	562-IV-F/F-SS-002	562-SS-002	2/24/2014	385	NA	562	so	V	3	180	<4.9	<4.9	<4.9	<4.9	NA	South sidewall
IV	562-IV-F/F-SS-003	562-SS-003	2/24/2014	385	NA	562	so	V	5	178	<4.9	<4.9	<4.9	<4.9	NA	South sidewall
IV	562-IV-F/F-SS-004	562-SS-004	2/24/2014	372	NA	562	so	V	3	180	<5	<5	<5	<5	NA	West sidewall
IV	562-IV-F/F-SS-005	562-SS-005	2/24/2014	372	NA	562	so	E	5	178	207	317	389	920	NA	West sidewall
IV	562-IV-F/F-SS-006	562-SS-006	2/24/2014	372	NA	562	so	V	3	180	<5	<5	<5	<5	NA	East sidewall
IV	562-IV-F/F-SS-007	562-SS-007	2/24/2014	372	NA	562	so	V	5	178	<25	<25	398	440	NA	East sidewall
IV	562-IV-F/F-SS-008	562-SS-008	2/24/2014	372	NA	562	so	V	3	180	<4.9	<4.9	31.2	46	NA	North sidewall

TABLE 4

SOIL SAMPLE RESULTS - TPH

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8015 Modified[1], units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	TPH - as gasoline	TPH as diesel	TPH as motor oil	TPH total	Remarks	Location Remarks
IV	562-IV-F/F-SS-009	562-SS-009	2/24/2014	372	NA	562	so	V	5	178	<5	<5	<5	<5	NA	North sidewall
IV	562-IV-F/F-SS-010	562-SS-010	3/11/2014	372	NA	562	so	V	8	175	<5	<5	<5	<5	Removal area	NA
IV	562-IV-F/F-SS-011	562-SS-011	3/11/2014	372	NA	562	so	V	10	173	<5	<5	<5	<5	Removal area	NA
IV	563-IV-F/F-SS-001	563-SS-001	2/24/2014	NA	NA	563	so	V	10	173	<5	<5	<5	<5	NA	Bottom
IV	563-IV-F/F-SS-002	563-SS-002	2/24/2014	372	NA	563	so	V	3	180	<4.9	<4.9	22.8	31	NA	South sidewall
IV	563-IV-F/F-SS-003	563-SS-003	2/24/2014	372	NA	563	so	V	5	178	<5	<5	<5	<5	NA	South sidewall
IV	563-IV-F/F-SS-004	563-SS-004	2/24/2014	359	NA	563	so	V	3	180	<5	<5	<5	8.8	NA	West sidewall
IV	563-IV-F/F-SS-005	563-SS-005	2/24/2014	359	NA	563	so	V	5	178	7.1	6.6	<5	24	NA	West sidewall
IV	563-IV-F/F-SS-006	563-SS-006	2/24/2014	359	NA	563	so	V	3	180	<25	100	435	540	NA	North sidewall
IV	563-IV-F/F-SS-007	563-SS-007	2/24/2014	359	NA	563	so	V	5	178	<4.9	<4.9	<4.9	<4.9	NA	North sidewall
IV	563-IV-F/F-SS-008	563-SS-008	2/24/2014	359	NA	563	so	E	3	180	3380	9450	10200	23000	NA	East sidewall
IV	563-IV-F/F-SS-009	563-SS-009	2/24/2014	359	NA	563	so	V	5	178	64	68	333	500	NA	East sidewall
IV	563-IV-F/F-SS-010	563-SS-010	3/6/2014	359	NA	563	so	V	3	180	<5	<5	<5	<5	Verification sample of soil removal for SS-008	NA
IV	563-IV-F/F-SS-011	563-SS-011	3/6/2014	359	NA	563	so	V	3	180	<5	159	92.8	270	Verification sample of soil removal for SS-008	NA
IV	564-IV-F/F-SS-001	564-SS-001	2/24/2014	NA	NA	564	so	E	10	173	125	542	1004	1700	NA	Bottom
IV	564-IV-F/F-SS-002	564-SS-002	2/24/2014	346	NA	564	so	V	3	180	<25	<25	642	680	NA	East sidewall
IV	564-IV-F/F-SS-003	564-SS-003	2/24/2014	346	NA	564	so	V	5	178	<5	<5	<5	<5	NA	East sidewall
IV	564-IV-F/F-SS-004	564-SS-004	2/24/2014	359	NA	564	so	V	3	180	81	266	447	790	NA	South sidewall
IV	564-IV-F/F-SS-005	564-SS-005	2/24/2014	359	NA	564	so	V	5	178	<4.9	<4.9	<4.9	17	NA	South sidewall
IV	564-IV-F/F-SS-006	564-SS-006	2/24/2014	346	NA	564	so	V	3	180	8.6	39.3	117	170	NA	West sidewall
IV	564-IV-F/F-SS-007	564-SS-007	2/24/2014	346	NA	564	so	V	5	178	<4.9	<4.9	<4.9	<4.9	NA	West sidewall
IV	564-IV-F/F-SS-008	564-SS-008	2/24/2014	NA	NA	564	so	V	3	180	20.5	147	518	690	NA	North sidewall
IV	564-IV-F/F-SS-009	564-SS-009	2/24/2014	346	NA	564	so	V	5	178	<5	140	491	640	NA	North sidewall
IV	564-IV-F/F-SS-010	564-SS-010	3/6/2014	NA	NA	564	so	V	13	170	<4.9	<4.9	<4.9	<4.9	Verification sample for soil removal at 564-IV-F/F-SS-001	NA

TABLE 4

SOIL SAMPLE RESULTS - TPH

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8015 Modified[1], units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	TPH - as gasoline	TPH as diesel	TPH as motor oil	TPH total	Remarks	Location Remarks
IV	#931	#931	3/20/2014	346	NA	564	so	V	3	180	<5	<5	16.1	32	Verification for soil removal at #849	East sidewall
IV	566-IV-F/F-SS-001	566-SS-001	2/24/2014	383	NA	566	so	V	3	180	<5	<5	<5	<5	NA	South sidewall
IV	566-IV-F/F-SS-002	566-SS-002	2/24/2014	384	NA	566	so	V	5	178	<5	5.5	55.8	74	NA	South sidewall
IV	566-IV-F/F-SS-003	566-SS-003	2/24/2014	NA	NA	566	so	V	10	173	<4.9	87.7	392	480	NA	South Wall
IV	566-IV-F/F-SS-004	566-SS-004	2/24/2014	370	NA	566	so	V	3	180	<4.9	<4.9	79.5	91	NA	West sidewall
IV	566-IV-F/F-SS-005	566-SS-005	2/24/2014	370	NA	566	so	V	5	178	<5	<5	<5	<5	NA	West sidewall
IV	566-IV-F/F-SS-006	566-SS-006	2/24/2014	371	NA	566	so	V	3	180	<5	25.5	96.1	120	NA	East sidewall
IV	566-IV-F/F-SS-007	566-SS-007	2/24/2014	371	NA	566	so	V	5	178	<5	<5	<5	<5	NA	East sidewall
IV	566-IV-F/F-SS-008	566-SS-008	2/24/2014	370	NA	566	so	V	3	180	<25	69	588	670	NA	North sidewall
IV	566-IV-F/F-SS-009	566-SS-009	2/24/2014	371	NA	566	so	V	5	178	<5	<5	<5	<5	NA	North sidewall
IV	567-IV-F/F-SS-001	567-SS-001	2/24/2014	345	NA	567	so	V	10	173	<5	<5	<5	<5	NA	Bottom
IV	567-IV-F/F-SS-002	567-SS-002	2/24/2014	344	NA	567	so	V	5	178	<5	<5	<5	<5	NA	West sidewall
IV	567-IV-F/F-SS-003	567-SS-003	2/24/2014	344	NA	567	so	V	5	178	<4.9	<4.9	<4.9	<4.9	NA	North sidewall
IV	567-IV-F/F-SS-004	567-SS-004	2/24/2014	344	NA	567	so	V	3	180	<4.9	<4.9	<4.9	<4.9	NA	West sidewall
IV	567-IV-F/F-SS-005	567-SS-005	2/24/2014	345	NA	567	so	V	3	180	<4.9	<4.9	53.4	58	NA	East sidewall
IV	567-IV-F/F-SS-006	567-SS-006	2/24/2014	345	NA	567	so	V	5	178	<5	<5	<5	<5	NA	East sidewall
IV	567-IV-F/F-SS-007	567-SS-007	2/24/2014	344	NA	567	so	V	3	180	<5	<5	<5	<5	NA	South sidewall
IV	567-IV-F/F-SS-008	567-SS-008	2/24/2014	345	NA	567	so	V	5	178	<4.9	11.2	6.4	37	NA	South sidewall
IV	567-IV-F/F-SS-009	567-SS-009	2/24/2014	345	NA	567	so	V	3	180	<5	<5	<5	<5	NA	North sidewall
IV	568-IV-F/F-SS-001	568-SS-001	2/24/2014	NA	NA	568	so	V	10	173	<5	<5	<5	<5	NA	Bottom
IV	568-IV-F/F-SS-002	568-SS-002	2/24/2014	357	NA	568	so	V	3	180	<5	33	50.3	92	NA	West sidewall
IV	568-IV-F/F-SS-003	568-SS-003	2/24/2014	357	NA	568	so	V	5	178	15.9	152.1	234	400	NA	West sidewall
IV	568-IV-F/F-SS-004	568-SS-004	2/24/2014	357	NA	568	so	V	3	180	<4.9	<4.9	<4.9	<4.9	NA	North sidewall
IV	568-IV-F/F-SS-005	568-SS-005	2/24/2014	358	NA	568	so	V	5	178	<4.9	30	175	210	NA	North sidewall

TABLE 4

SOIL SAMPLE RESULTS - TPH

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8015 Modified[1], units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	TPH - as gasoline	TPH as diesel	TPH as motor oil	TPH total	Remarks	Location Remarks
IV	568-IV-F/F-SS-006	568-SS-006	2/24/2014	371	NA	568	so	V	3	180	<5	<5	<5	<5	NA	South sidewall
IV	568-IV-F/F-SS-007	568-SS-007	2/24/2014	371	NA	568	so	V	5	178	<5	57.1	128	190	NA	South sidewall
IV	568-IV-F/F-SS-008	568-SS-008	2/24/2014	358	NA	568	so	V	3	180	<5	<5	12.7	16	NA	East sidewall
IV	568-IV-F/F-SS-009	568-SS-009	2/24/2014	358	NA	568	so	V	5	178	<5	<5	<5	<5	NA	East sidewall
IV	570-IV-P/S-O-001	570-O-001	2/25/2014	NA	NA	570	ot	V	0	183	<4.9	<4.9	38	41	Gray Material inside struc.	NA
IV	580-IV-F/F-SS-001	580-SS-001	3/5/2014	NA	NA	580	so	E	7	176	<240	320	34700	35000	Column C/Row 49 footing	East sidewall
IV	580-IV-F/F-SS-002	580-SS-002	3/5/2014	NA	NA	580	so	V	10	173	<5	<5	335.4	330	Column C/Row 49 footing	Floor
IV	580-IV-F/F-SS-003	580-SS-003	3/5/2014	NA	NA	580	so	D	0	183	<500	<500	28200	28000	Stockpile, dark gray and stained	NA
IV	#869	#869	3/4/2014	NA	NA	594	so	V	5	178	<5	<5	<5	<5	Verification samples for #849 removal Floor	Floor
IV	#870	#870	3/4/2014	NA	NA	594	so	V	5	178	<5	<5	<5	<5	Verification samples for #849 removal sidewall, east side	East sidewall
IV	615-IV-P/S-O-001	615-O-001	3/11/2014	NA	NA	615	so	D	0	183	6570	12330	13650	32000	Oily and metal shavings inside structure	NA
IV	615-IV-P/S-SS-001	615-SS-001	3/11/2014	NA	NA	615	so	V	7	176	<5	<5	<5	<5	Soil Removal	West sidewall
IV	615-IV-P/S-SS-002	615-SS-002	3/11/2014	NA	NA	615	so	V	8	175	<4.9	<4.9	<4.9	17	Soil Removal	Bottom, West
IV	615-IV-P/S-SS-003	615-SS-003	3/11/2014	NA	NA	615	so	V	8	175	<5	<5	<5	<5	Soil Removal	Bottom, West
IV	615-IV-P/S-SS-004	615-SS-004	3/11/2014	NA	NA	615	so	V	7	176	<5	<5	<5	<5	Gray, Hydrocarbon odor, Soil Removal	East sidewall
IV	642-IV-P-SS-003	642-SS-003	3/20/2014	NA	NA	642	so	V	4	179	<1	27.1	146	170	Beneath pipe	NA
IV	642-IV-P-O-001	642-O-001	3/20/2014	NA	NA	642	ot	D	4.5	178.5	<1	33.9	77.3	110	Reddish brown sludge	NA
IV	648-IV-P/S-O-001	648-O-001	3/25/2014	C	NA	648	ot	D	0	183	<25	340	1223	1600	Black sludge in bottom of structure	NA
IV	658-IV-P/S-SS-001	658-SS-001	3/25/2014	NA	NA	658	so	V	0	183	<25	173	206	420	Gray soil attached to structure	NA
IV	676-IV-R/R-SS-001	676-SS-001	3/31/2014	NA	NA	676	so	V	3.5	179.5	<5	<5	<5	<5	Rail bed under ballast, 10' North of Row 52	NA
IV	676-IV-R/R-SS-002	676-SS-002	3/31/2014	NA	NA	676	so	V	3.5	179.5	<5	<5	<5	<5	Rail bed under ballast, Row 54	NA
IV	676-IV-R/R-SS-003	676-SS-003	3/31/2014	NA	NA	676	so	V	3.5	179.5	<5	<5	<5	<5	Rail bed under ballast, 10' South of Row 56	NA
IV	676-IV-R/R-SS-004	676-SS-004	3/31/2014	NA	NA	676	so	V	3.5	179.5	<5	<5	<5	9.2	Rail bed under ballast, 15' North of Row 60	NA
IV	#949	#949	3/31/2014	351	NA	676	so	V	3	180	<4.9	<4.9	<4.9	<4.9	Beige asphalt/brick, Row 53, 30' West of Column G	NA

TABLE 4

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Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

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EPA Test Method 8015 Modified[1], units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	TPH - as gasoline	TPH as diesel	TPH as motor oil	TPH total	Remarks	Location Remarks
IV	696-IV-P/S-SS-001	696-SS-001	4/2/2014	NA	NA	696	so	D	NA	NA	12640	207	<50	13000	Black, hydrocarbon odor	NA
IV	696-IV-P/S-SS-002	696-SS-002	4/2/2014	NA	NA	696	so	D	NA	NA	7610	<49	<49	7700	Black, hydrocarbon odor	NA
IV	696-IV-P/S-SS-003	696-SS-003	4/9/2014	NA	NA	696	so	V	8	175	300	61	56.1	420	Sample under structure	North end
IV	696-IV-P/S-SS-004	696-SS-004	4/9/2014	NA	NA	696	so	V	8	175	66	<5	<5	73	Sample under structure, middle	NA
IV	696-IV-P/S-SS-005	696-SS-005	4/9/2014	NA	NA	696	so	V	8	175	268	62.8	57	390	Sample under structure	West end
IV	696-IV-P/S-SS-006	696-SS-006	4/14/2014	NA	NA	696	so	V	10	173	8580	61	<51	8800	Deeper sample below SS-005	NA
IV	696-IV-P/S-SS-007	696-SS-007	4/14/2014	NA	NA	696	so	V	10	173	8020	64	<49	8200	Deeper sample below SS-003	NA
IV	696-IV-P/S-SS-008	696-SS-008	4/21/2014	NA	NA	696	so	V	12	171	6470	<49	<49	6500	Deeper sample below SS-007	NA
IV	696-IV-P/S-SS-009	696-SS-009	4/21/2014	NA	NA	696	so	V	12	171	873	18.2	<5	920	Deeper sample below SS-006	NA
IV	715-IV-P/S-O-001	715-O-001	4/9/2014	NA	NA	715	ot	D	NA	NA	<25	357	2004	2400	Black-stained, hydrocarbon	NA
IV	715-IV-P/S-O-002	715-O-002	4/16/2014	NA	NA	715	ot	D	NA	NA	2070	21670	87800	110000	Black oily sludge from internal sump	NA
IV	742-IV-P/S-O-001	742-O-001	4/15/2014	NA	NA	742	ot	D	NA	NA	<5	<5	19.8	26	Sediment inside structure	NA
IV	748-IV-P/S-O-001	748-O-001	4/16/2014	NA	NA	748	ot	D	NA	NA	1590	8580	18100	28000	Black oily sludge from on top of structure	NA
IV	777-IV-P/S-O-001	777-O-001	4/21/2014	NA	NA	777	ot	D	NA	NA	2300	3000	18000	25000	Sediment (black) inside sump	NA
IV	809-IV-P/S-O-002	809-O-002	5/7/2014	NA	NA	809	ot	V	NA	NA	<5	<5	6.3	15	Black sediment inside structure	NA
IV	849-IV-P/S-SS-001	849-SS-001	5/13/2014	NA	NA	849	so	V	10	173	<5	<5	107.7	110	Beneath structure footprint	North end
IV	849-IV-P/S-SS-002	849-SS-002	5/13/2014	NA	NA	849	so	V	8	175	<4.9	<4.9	<4.9	<4.9	Beneath structure footprint	South end
IV	849-IV-P/S-O-002	849-O-002	5/7/2014	NA	NA	849	ot	D	NA	NA	<250	2130	45680	48000	Black sediment inside structure	NA
IV	855-IV-P/S-O-001	855-O-001	5/8/2014	NA	NA	855	ot	V	NA	NA	<5	<5	<5	9.2	Black sediment inside vault	NA
IV	876-IIIB-O-O-001	876-O-001	5/19/2014	NA	NA	876	ot	D	NA	NA	11800	1680	2550	17000	Black material inside structure	NA

TABLE 4

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EPA Test Method 8015 Modified[1], units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	TPH - as gasoline	TPH as diesel	TPH as motor oil	TPH total	Remarks	Location Remarks
IV	#833	#833	2/20/2014	A/P	NA	NA	so	V	NA	NA	<5	<5	<5	<5	Stockpile from H60	NA
IV	#834	#834	2/20/2014	384	NA	NA	so	V	NA	NA	<5	<5	<5	<5	Stockpile sample, light brown/rusty, Row 60 /10' East of Column H	NA
IV	#835	#835	2/20/2014	NA	NA	NA	so	E	NA	NA	<5	<5	17.9	34	Stockpile from Column H/Row 60	NA
IV	#836	#836	2/21/2014	330	NA	NA	so	V	2.5	180.5	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#837	#837	2/21/2014	331	NA	NA	so	V	2.5	180.5	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#838	#838	2/21/2014	344	NA	NA	so	V	2.75	180.25	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#839	#839	2/21/2014	343	NA	NA	so	V	3	180	<4.9	<4.9	<4.9	<4.9	Verification for potential reuse onsite	NA
IV	#840	#840	2/21/2014	344	NA	NA	so	V	5	178	<4.9	<4.9	<4.9	<4.9	Verification for potential reuse onsite	NA
IV	#841	#841	2/21/2014	343	NA	NA	so	V	3	180	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#842	#842	2/21/2014	357	NA	NA	so	V	5	178	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#843	#843	2/21/2014	357	NA	NA	so	V	3	180	<5	26.8	320	350	Verification for potential reuse onsite	NA
IV	#844	#844	2/21/2014	357	NA	NA	so	V	3	180	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#845	#845	2/21/2014	370	NA	NA	so	V	3	180	<49	<49	458	470	Verification for potential reuse onsite	NA
IV	#846	#846	2/21/2014	356	NA	NA	so	V	3	180	<4.9	<4.9	<4.9	<4.9	Verification for potential reuse onsite	NA
IV	#847	#847	2/21/2014	390	NA	NA	so	V	4	179	<10	<10	113	140	Verification for potential reuse onsite	NA
IV	#848	#848	2/21/2014	370	NA	NA	so	V	3	180	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#849	#849	2/21/2014	369	NA	NA	so	E	3	180	<49	837	2530	3400	Verification for potential reuse onsite	NA
IV	#850	#850	2/21/2014	369	NA	NA	so	V	5	178	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#851	#851	2/21/2014	356	NA	NA	so	V	5	178	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#852	#852	2/21/2014	343	NA	NA	so	V	5	178	<5	<5	<5	<5	Verification for potential reuse onsite	NA
IV	#853	#853	2/21/2014	331	NA	NA	so	V	5	178	<4.9	<4.9	<4.9	<4.9	Verification for potential reuse onsite	NA
IV	#866	#866	2/26/2014	NA	NA	NA	so	E	1	182	<500	1400	69000	70000	Gray soil, odor, adjacent Column C/Row 49	East sidewall
IV	#898	#898	3/6/2014	359	NA	NA	so	E	6	177	244	1644	3540	5400	North of Structure 563 excavation, gray soil under pad	NA
IV	#928	#928	3/20/2014	369	NA	NA	so	V	5	178	<5	38	790	840	Verification for soil removal at #849	East sidewall
IV	#929	#929	3/20/2014	369	NA	NA	so	V	6	177	<5	33.7	1206	1200	Verification for soil removal at #849	East sidewall
IV	#930	#930	3/20/2014	369	NA	NA	so	V	5	178	<5	13.9	66.2	85	Verification for soil removal at #849	East sidewall
IV	#935	#935	3/24/2014	487	NA	NA	so	V	4	179	<4.9	<4.9	<4.9	<4.9	10' South of Column G/Row 63; brownish red soil	NA
IV	#992	#992	4/28/2014	NA	NA	NA	so	D	NA	NA	1950	53	435	2400	Stockpile samples - stockpile soil associated with structure removal in Areas of 9A, 9B, 9D	NA
IV	#993	#993	4/28/2014	NA	NA	NA	so	V	NA	NA	<5.1	<5.1	43	51	Stockpile samples - stockpile soil associated with structure removal in Areas of 9A, 9B, 9D	NA
IV	#994	#994	4/28/2014	NA	NA	NA	so	V	NA	NA	<5	<5	65.7	66	Stockpile samples - stockpile soil associated with structure removal in Areas of 9A, 9B, 9D	NA
IV	#995	#995	4/28/2014	NA	NA	NA	so	V	NA	NA	<5	11.4	99.6	110	Stockpile samples - stockpile soil associated with structure removal in Areas of 9A, 9B, 9D	NA
IV	#996	#996	4/28/2014	NA	NA	NA	so	V	NA	NA	<5	<5	51	51	Stockpile samples - stockpile soil associated with structure removal in Areas of 9A, 9B, 9D	NA
IV	#997	#997	4/28/2014	NA	NA	NA	so	D	NA	NA	5963	53	54	6100	Stockpile samples - stockpile soil associated with structure removal in Areas of 9A, 9B, 9D	NA
IV	#1005	#1005	4/29/2014	NA	NA	NA	so	V	NA	NA	<1	88.3	506	600	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1006	#1006	4/29/2014	NA	NA	NA	so	V	NA	NA	320	244.1	1010	1600	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1007	#1007	4/29/2014	NA	NA	NA	so	V	NA	NA	305.5	118	423	840	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1008	#1008	4/29/2014	NA	NA	NA	so	V	NA	NA	322	141.1	345	810	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA

TABLE 4

SOIL SAMPLE RESULTS - TPH

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8015 Modified[1], units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	TPH - as gasoline	TPH as diesel	TPH as motor oil	TPH total	Remarks	Location Remarks
IV	#1009	#1009	4/29/2014	NA	NA	NA	so	D	NA	NA	5224	143	185	5500	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1010	#1010	4/29/2014	NA	NA	NA	so	D	NA	NA	1740	568	1160	3500	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1011	#1011	4/29/2014	NA	NA	NA	so	D	NA	NA	558.3	203.6	505	1300	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1012	#1012	4/29/2014	NA	NA	NA	so	D	NA	NA	888	849	1531	3300	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1013	#1013	4/29/2014	NA	NA	NA	so	D	NA	NA	894	807	1437	3100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1014	#1014	4/29/2014	NA	NA	NA	so	V	NA	NA	214	151.1	522	890	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1015	#1015	4/29/2014	NA	NA	NA	so	D	NA	NA	877	340	555	1800	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65	NA
IV	#1028	#1028	5/14/2014	NA	NA	NA	so	D	NA	NA	170	<74	1960	2300	TPH stockpiles; South end of stockpile between Rows 63 & 67 after removing South end	South end
IV	#1029	#1029	5/14/2014	NA	NA	NA	so	D	NA	NA	550	200	7670	8500	TPH stockpiles; South end of stockpile between Rows 63 & 67 after removing South end	South end
IV	#1030	#1030	5/14/2014	NA	NA	NA	so	D	NA	NA	340	120	6260	6800	TPH stockpiles; South end of stockpile between Rows 63 & 67 after removing South end	South end
IV	#1031	#1031	5/14/2014	NA	NA	NA	so	D	NA	NA	375	157.5	933	1500	TPH stockpiles; East end of stockpile after removing East end; stockpile near Row 65 and Column C	East end
IV	#1032	#1032	5/14/2014	NA	NA	NA	so	V	NA	NA	340	<74	482	1000	TPH stockpiles; East end of stockpile after removing East end; stockpile near Row 65 and Column C	East end
IV	#1033	#1033	5/14/2014	NA	NA	NA	so	D	NA	NA	1000	265	2950	4300	TPH stockpiles; East end of stockpile after removing East end; stockpile near Row 65 and Column C	East end
IV	#1034	#1034	5/14/2014	NA	NA	NA	so	D	NA	NA	546	88.9	465	1100	TPH stockpiles; East end of stockpile after removing East end; stockpile near Row 65 and Column C	East end
IV	#1250	#1250	7/16/2014	NA	NA	NA	so	V	NA	NA	<5	<5	<5	11	Stockpile sample of golden brown material	NA
IV	#1264	#1264	7/22/2014	296	NA	NA	so	E	4	183	2932	443	<25	3500	Hydrocarbon removal area between Rows 42-46/Columns D and H	South sidewall; on ramp
IV	#1269	#1269	7/22/2014	NA	NA	NA	so	E	6	181	1000	1094	731	2800	Hydrocarbon removal area between Rows 42-46/Columns D and H	East sidewall, South end
IV	#1307	#1307	7/28/2014	NA	NA	NA	so	V	6	181	<4.9	<4.9	<4.9	<5	NA	NA
IV	#1308	#1308	7/28/2014	296	NA	NA	so	V	3	184	290	162	177	630	NA	NA
IV	#1309	#1309	7/28/2014	296	NA	NA	so	V	4	183	300	341	2170	2800	NA	NA
IV	#1329	#1329	7/30/2014	NA	NA	NA	so	V	6	177	<5	<5	<5	<5	Verification sample for soil removal area at #1310	Sidewall
IV	#867	#867	3/4/2014	369	NA	NA	so	V	5	178	<5	<5	<5	<5	Verification samples for #849 removal sidewall, east side	East sidewall
IV	#868	#868	3/4/2014	369	NA	NA	so	V	5	178	<50	162	3440	3600	Verification samples for #849 removal Floor	Floor
IV	#934	#934	3/24/2014	NA	NA	NA	ot	D	NA	NA	570	8100	17200	26000	Black stained substance inside sump	NA
VI	885-IV-R/R-SS-001	885-SS-001	5/21/2014	NA	NA	885	so	E	4	179	<5	<5	<5	<5	Collected below rail line and ballast from Col. G to almost Column H; along southern fence line	NA
VI	885-IV-R/R-SS-002	885-SS-002	5/21/2014	NA	NA	885	so	V	4	179	<5	<5	<5	<5	Collected below rail line and ballast from Col. G to almost Column H; along southern fence line	NA
VI	885-IV-R/R-SS-003	885-SS-003	5/21/2014	NA	NA	885	so	V	4	179	<5	<5	48.8	60	Collected below rail line and ballast from Col. G to almost Column H; along southern fence line	NA
VI	885-IV-R/R-SS-004	885-SS-004	5/21/2014	NA	NA	885	so	V	4	179	<5	5.4	30.3	55	Collected below rail line and ballast from Col. G to almost Column H; along southern fence line	NA

TABLE 4

SOIL SAMPLE RESULTS - TPH

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8015 Modified[1], units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	TPH - as gasoline	TPH as diesel	TPH as motor oil	TPH total	Remarks	Location Remarks
VI	885-IV-R/R-SS-005	885-SS-005	5/21/2014	NA	NA	885	so	V	4	179	<5	<5	12.4	17	Collected below rail line and ballast from Column G to almost Column H; along southern fence line	NA
VI	885-IV-R/R-SS-006	885-SS-006	5/21/2014	NA	NA	885	so	V	4	179	<5	<5	<5	<5	Collected below rail line and ballast from Column G to almost Column H; along southern fence line	NA
VI	885-IV-R/R-SS-007	885-SS-007	5/21/2014	NA	NA	885	so	E	4	179	<5	<5	<5	<5	Collected below rail line and ballast from Column G to almost Column H; along southern fence line	NA
VI	885-IV-R/R-SS-012	885-SS-012	5/29/2014	NA	NA	885	so	V	5	178	<5	<5	<5	<5	At SS-003, deeper	NA
VI	885-IV-R/R-SS-013	885-SS-013	5/29/2014	NA	NA	885	so	V	6	177	<5	<5	<5	<5	At SS-003, deeper	NA
VI	885-IV-R/R-SS-014	885-SS-014	5/29/2014	NA	NA	885	so	V	5	178	6.2	5.5	14.8	44	At SS-004, deeper	NA
VI	885-IV-R/R-SS-015	885-SS-015	5/29/2014	NA	NA	885	so	V	6	177	<5	<5	<5	<5	At SS-004, deeper	NA
VI	885-IV-R/R-SS-016	885-SS-016	5/29/2014	NA	NA	885	so	V	5	178	<5	<5	<5	<5	At SS-005, deeper	NA
VI	885-IV-R/R-SS-017	885-SS-017	5/29/2014	NA	NA	885	so	V	6	177	<5	<5	<5	<5	At SS-005, deeper	NA
VI	#990	#990	4/28/2014	NA	NA	NA	so	D	NA	NA	7260	<98	2230	9600	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d	NA
VI	#991	#991	4/28/2014	NA	NA	NA	so	D	NA	NA	2050	<51	3038	5100	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d	NA

Note

1. EPA 8015 Modified for carbon chain speciation.

Abbreviations

so = soil
< = not detected at the stated reporting limit
– = not analyzed
mg/kg = milligram per kilogram
NA = not applicable
feet bls = feet below slab
TPH = total petroleum hydrocarbons

D = disposed
E = excavated
V = verification sample
V/E = verification sample but excavated
ot = other

TABLE 5

SOIL SAMPLE RESULTS - VOCs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8260B; units in ug/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	1,1,1-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trichlorobenzene	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Dichloromethane (methylene chloride)	Ethylbenzene	Isopropylbenzene	Methyl Ethyl Ketone (MEK) (2-Butanone)	4-Methyl-2-Pentanone	n-Butylbenzene	Isopropyltoluene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylene -o	Xylene -p, -m	Remarks
III	#865	#865	2/25/2014	316	NA	NA	so	V	3.5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<130	<5.1	<51	<5.1	<5.1	<51	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	Gray soil, TPH odor
IIIA	574-IIIA-P/S-O-001	574-O-001	2/26/2014	NA	NA	574	ot	D	NA	<5	<5	<5	<5	<5	<5	<50	<2	<50	<2	<5	<50	<50	<5	<5	<5	<2	<5	<5	<2	2.1	Debris sample from interior of structure
IV	562-IV-F/F-SS-001	562-SS-001	2/24/2014	NA	NA	562	so	V	10	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	Bottom
IV	562-IV-F/F-SS-002	562-SS-002	2/24/2014	385	NA	562	so	V	3	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	South sidewall
IV	562-IV-F/F-SS-003	562-SS-003	2/24/2014	385	NA	562	so	V	5	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	South sidewall
IV	562-IV-F/F-SS-004	562-SS-004	2/24/2014	372	NA	562	so	V	3	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	West sidewall
IV	562-IV-F/F-SS-005	562-SS-005	2/24/2014	372	NA	562	so	E	5	<4.9	<4.9	36	35	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	6.4	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	West sidewall
IV	562-IV-F/F-SS-006	562-SS-006	2/24/2014	372	NA	562	so	V	3	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	East sidewall
IV	562-IV-F/F-SS-007	562-SS-007	2/24/2014	372	NA	562	so	V	5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	East sidewall
IV	562-IV-F/F-SS-008	562-SS-008	2/24/2014	372	NA	562	so	V	3	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<120	<4.8	<48	<4.8	<4.8	<48	<48	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	North sidewall
IV	562-IV-F/F-SS-009	562-SS-009	2/24/2014	372	NA	562	so	V	5	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	North sidewall
IV	563-IV-F/F-SS-001	563-SS-001	2/24/2014	NA	NA	563	so	V	10	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	Bottom
IV	563-IV-F/F-SS-002	563-SS-002	2/24/2014	372	NA	563	so	V	3	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	South sidewall
IV	563-IV-F/F-SS-003	563-SS-003	2/24/2014	372	NA	563	so	V	5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	South sidewall
IV	563-IV-F/F-SS-004	563-SS-004	2/24/2014	359	NA	563	so	V	3	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	West sidewall
IV	563-IV-F/F-SS-005	563-SS-005	2/24/2014	359	NA	563	so	V	5	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	West sidewall
IV	563-IV-F/F-SS-006	563-SS-006	2/24/2014	359	NA	563	so	V	3	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	North sidewall
IV	563-IV-F/F-SS-007	563-SS-007	2/24/2014	359	NA	563	so	V	5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<130	<5.1	<51	<5.1	<5.1	<51	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	North sidewall
IV	563-IV-F/F-SS-008	563-SS-008	2/24/2014	359	NA	563	so	E	3	<2400	<2400	12000	5200	<2400	<2400	<60000	<2400	<24000	<2400	<2400	<24000	<24000	4500	3400	<2400	<2400	<2400	<2400	<2400	<2400	East sidewall
IV	563-IV-F/F-SS-009	563-SS-009	2/24/2014	359	NA	563	so	V	5	<1000	<1000	<1000	<1000	<1000	<1000	<25000	<1000	<10000	<1000	<1000	<10000	<10000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	East sidewall
IV	563-IV-F/F-SS-010	563-SS-010	3/6/2014	359	NA	563	so	V	3	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	Verification sample for soil removal for SS-008
IV	563-IV-F/F-SS-011	563-SS-011	3/6/2014	359	NA	563	so	V	3	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	Verification sample for soil removal for SS-008
IV	564-IV-F/F-SS-001	564-SS-001	2/24/2014	NA	NA	564	so	E	10	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<130	<5.1	<51	<5.1	<5.1	<51	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	Bottom
IV	564-IV-F/F-SS-002	564-SS-002	2/24/2014	346	NA	564	so	V	3	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	East sidewall
IV	564-IV-F/F-SS-003	564-SS-003	2/24/2014	346	NA	564	so	V	5	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	East sidewall
IV	564-IV-F/F-SS-004	564-SS-004	2/24/2014	359	NA	564	so	V	3	<5	<5	24	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	South sidewall
IV	564-IV-F/F-SS-005	564-SS-005	2/24/2014	359	NA	564	so	V	5	<5	<5	<5	<5	<5	<5	140	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	South sidewall
IV	564-IV-F/F-SS-006	564-SS-006	2/24/2014	346	NA	564	so	V	3	<5	<5	9.6	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	West sidewall
IV	564-IV-F/F-SS-007	564-SS-007	2/24/2014	346	NA	564	so	V	5	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	West sidewall
IV	564-IV-F/F-SS-008	564-SS-008	2/24/2014	NA	NA	564	so	V	3	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<130	<5.1	<51	<5.1	<5.1	<51	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	North sidewall
IV	564-IV-F/F-SS-009	564-SS-009	2/24/2014	346	NA	564	so	V	5	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	North sidewall
IV	566-IV-F/F-SS-001	566-SS-001	2/24/2014	383	NA	566	so	V	3	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	South sidewall
IV	566-IV-F/F-SS-002	566-SS-002	2/24/2014	384	NA	566	so	V	5	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	South sidewall
IV	566-IV-F/F-SS-003	566-SS-003	2/24/2014	NA	NA	566	so	V	10	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	South Wall
IV	566-IV-F/F-SS-004	566-SS-004	2/24/2014	370	NA	566	so	V	3	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	West sidewall
IV	566-IV-F/F-SS-005	566-SS-005	2/24/2014	370	NA	566	so	V	5	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	West sidewall
IV	566-IV-F/F-SS-006	566-SS-006	2/24/2014	371	NA	566	so	V	3	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	East sidewall
IV	566-IV-F/F-SS-007	566-SS-007	2/24/2014	371	NA	566	so	V	5	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	East sidewall
IV	566-IV-F/F-SS-008	566-SS-008	2/24/2014	370	NA	566	so	V	3	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<130	<5.1	<51	<5.1	<5.1	<51	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	North sidewall
IV	566-IV-F/F-SS-009	566-SS-009	2/24/2014	371	NA	566	so	V	5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	North sidewall
IV	567-IV-F/F-SS-001	567-SS-001	2/24/2014	345	NA	567	so	V	10	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	Bottom
IV	567-IV-F/F-SS-002	567-SS-002	2/24/2014	344	NA	567	so	V	5	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<120	<4.8	<48	<4.8	<4.8	<48	<48	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	West sidewall
IV	567-IV-F/F-SS-003	567-SS-003	2/24/2014	344	NA	567	so	V	5	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	North sidewall
IV	567-IV-F/F-SS-004	567-SS-004	2/24/2014	344	NA	567	so	V	3	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	West sidewall
IV	567-IV-F/F-SS-005	567-SS-005	2/24/2014	345	NA	567	so	V	3	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	East sidewall
IV	567-IV-F/F-SS-006	567-SS-006	2/24/2014	345	NA	567	so	V	5	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<130	<5.1	<51	<5.1	<5.1	<51	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	East sidewall
IV	567-IV-F/F-SS-007	567-SS-007	2/24/2014	344	NA	567	so	V	3	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<130	<5.1	<51	<5.1	<5.1	<51	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	South sidewall
IV	567-IV-F/F-SS-008	567-SS-008	2/24/2014	345	NA	567	so	V	5	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	South sidewall
IV	567-IV-F/F-SS-009	567-SS-009	2/24/2014	345	NA	567	so	V	3	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	North sidewall

TABLE 5

SOIL SAMPLE RESULTS - VOCs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8260B; units in ug/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	1,1,1-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trichlorobenzene	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Dichloromethane (methylene chloride)	Ethylbenzene	Isopropylbenzene	Methyl Ethyl Ketone (MEK) (2-Butanone)	4-Methyl-2-Pentanone	n-Butylbenzene	Isopropyltoluene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylene -o	Xylene -p, -m	Remarks
IV	568-IV-F/F-SS-001	568-SS-001	2/24/2014	NA	NA	568	so	V	10	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<120	<4.9	<49	<4.9	<4.9	<49	<49	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	Bottom
IV	568-IV-F/F-SS-002	568-SS-002	2/24/2014	357	NA	568	so	V	3	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	West sidewall
IV	568-IV-F/F-SS-003	568-SS-003	2/24/2014	357	NA	568	so	V	5	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<130	<5.2	<52	<5.2	<5.2	<52	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	West sidewall
IV	568-IV-F/F-SS-004	568-SS-004	2/24/2014	357	NA	568	so	V	3	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	North sidewall
IV	568-IV-F/F-SS-005	568-SS-005	2/24/2014	358	NA	568	so	V	5	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<120	<4.8	<48	<4.8	<4.8	<48	<48	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	North sidewall
IV	568-IV-F/F-SS-006	568-SS-006	2/24/2014	371	NA	568	so	V	3	<5	<5	<5	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	South sidewall
IV	568-IV-F/F-SS-007	568-SS-007	2/24/2014	371	NA	568	so	V	5	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	South sidewall
IV	568-IV-F/F-SS-008	568-SS-008	2/24/2014	358	NA	568	so	V	3	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	East sidewall
IV	568-IV-F/F-SS-009	568-SS-009	2/24/2014	358	NA	568	so	V	5	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	East sidewall
IV	570-IV-P/S-O-001	570-O-001	2/25/2014	NA	NA	570	ot	V	NA	<5	<5	<5	<5	<5	<5	<120	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	Gray Material inside structure
IV	642-IV-P-O-001	642-O-001	3/20/2014	NA	NA	642	ot	D	4.5	<5	<5	<5	<5	<5	<5	<50	<2	<50	<2	<5	<50	<50	<5	<5	<5	<2	<5	<5	<2	<2	Reddish brown sludge
IV	696-IV-P/S-SS-003	696-SS-003	4/9/2014	NA	NA	696	so	V	8	<510	<510	73	110	<510	<510	<13000	<510	<5100	<510	<510	<5100	<5100	<510	<510	<510	<510	<510	<510	<510	28	Sample under structure, north end
IV	696-IV-P/S-SS-004	696-SS-004	4/9/2014	NA	NA	696	so	V	8	<500	<500	100	110	<500	<500	<12000	<500	<5000	<500	<500	<5000	<5000	220	150	<500	<500	<500	<500	<500	<500	Sample under structure, middle
IV	696-IV-P/S-SS-005	696-SS-005	4/9/2014	NA	NA	696	so	V	8	<1000	<1000	<1000	190	<1000	<1000	<25000	<1000	<10000	<1000	<1000	<10000	<10000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	Sample under structure, west end
IV	696-IV-P/S-SS-006	696-SS-006	4/14/2014	NA	NA	696	so	V	10	<5000	<5000	15000	5200	<5000	<5000	<120000	<5000	<50000	<5000	<5000	<50000	<50000	6700	<5000	<5000	<5000	<5000	<5000	<5000	<5000	Deeper sample below SS-005
IV	696-IV-P/S-SS-007	696-SS-007	4/14/2014	NA	NA	696	so	V	10	<5000	<5000	32000	18000	<5000	<5000	<120000	<5000	<50000	<5000	<5000	<50000	<50000	9400	<5000	<5000	<5000	<5000	<5000	<5000	<5000	Deeper sample below SS-003
IV	696-IV-P/S-SS-008	696-SS-008	4/21/2014	NA	NA	696	so	V	12	<2500	<2500	4000	9700	<2500	<2500	<63000	<2500	<25000	<2500	<2500	<25000	<25000	6900	<2500	<2500	<2500	<2500	<2500	<2500	<2500	Deeper sample below SS-007
IV	696-IV-P/S-SS-009	696-SS-009	4/21/2014	NA	NA	696	so	V	12	<990	<990	<990	<990	<990	<990	<25000	<990	<9900	<990	<990	<9900	<9900	<990	<990	<990	<990	<990	<990	<990	<990	Deeper sample below SS-006
IV	715-IV-P/S-O-002	715-O-002	4/16/2014	NA	NA	715	ot	D	NA	<510	<510	3200	750	<510	<510	<13000	<510	<5100	<510	<510	<5100	<5100	1000	630	<510	<510	<510	<510	<510	<510	Black oily sludge from internal sump
IV	748-IV-P/S-O-001	748-O-001	4/16/2014	NA	NA	748	ot	D	NA	<490	<490	3800	1100	<490	<490	<12000	<490	<4900	<490	<490	<4900	<4900	2300	<490	<490	<490	<490	<490	<490	<490	Black oily sludge from on top of structure
IV	777-IV-P/S-O-001	777-O-001	4/21/2014	NA	NA	777	ot	D	NA	<1000	<1000	13000	2900	<1000	<1000	<25000	<1000	<10000	<1000	<1000	<10000	<10000	1800	2100	<1000	<1000	<1000	<1000	<1000	<1000	Sediment (black) inside sump
IV	876-IIIB-O-O-001	876-O-001	5/19/2014	NA	NA	876	ot	D	NA	<2500	<2500	<2500	<2500	<2500	<2500	<63000	<2500	<25000	<2500	<2500	<25000	<25000	<2500	<2500	<2500	<2500	<2500	<2500	<2500	<2500	Black material inside structure
IV	#836	#836	2/21/2014	330	NA	NA	so	V	2.5	<1.1	<1.1	<2.2	<2.2	<1.1	<1.1	<56	1.7	<11	<1.1	<1.1	<22	<22	<1.1	<1.1	<1.1	<1.1	<2.2	<1.1	<1.1	<2.2	Verification for potential reuse onsite
IV	#837	#837	2/21/2014	331	NA	NA	so	V	2.5	<0.95	<0.95	<1.9	<1.9	<0.95	<0.95	<48	2.2	<9.5	<0.95	<0.95	<19	<19	<0.95	<0.95	<0.95	<0.95	<1.9	<0.95	<0.95	<1.9	Verification for potential reuse onsite
IV	#838	#838	2/21/2014	344	NA	NA	so	V	2.75	<0.97	<0.97	<1.9	<1.9	<0.97	<0.97	<49	1.9	<9.7	<0.97	<0.97	<19	<19	<0.97	<0.97	<0.97	<0.97	<1.9	<0.97	<0.97	<1.9	Verification for potential reuse onsite
IV	#839	#839	2/21/2014	343	NA	NA	so	V	3	<0.93	<0.93	<1.9	<1.9	<0.93	<0.93	<46	1.9	<9.3	<0.93	<0.93	<19	<19	<0.93	<0.93	<0.93	<0.93	<1.9	<0.93	<0.93	<1.9	Verification for potential reuse onsite
IV	#840	#840	2/21/2014	344	NA	NA	so	V	5	<1	<1	<2	<2	<1	<1	<51	2.3	<10	<1	<1	<20	<20	<1	<1	<1	<1	<2	<1	<1	<2	Verification for potential reuse onsite
IV	#841	#841	2/21/2014	343	NA	NA	so	V	3	<0.94	<0.94	<1.9	<1.9	<0.94	<0.94	<47	1.7	<9.4	<0.94	<0.94	<19	<19	<0.94	<0.94	<0.94	<0.94	<1.9	<0.94	<0.94	<1.9	Verification for potential reuse onsite
IV	#842	#842	2/21/2014	357	NA	NA	so	V	5	<1.1	<1.1	<2.1	<2.1	<1.1	<1.1	<54	<1.1	<11	<1.1	<1.1	<21	<21	<1.1	<1.1	<1.1	<1.1	<2.1	<1.1	<1.1	<2.1	Verification for potential reuse onsite

TABLE 5

SOIL SAMPLE RESULTS - VOCs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8260B; units in ug/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	1,1,1-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trichlorobenzene	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Dichloromethane (methylene chloride)	Ethylbenzene	Isopropylbenzene	Methyl Ethyl Ketone (MEK) (2-Butanone)	4-Methyl-2-Pentanone	n-Butylbenzene	Isopropyltoluene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylene -o	Xylene -p, -m	Remarks
IV	#843	#843	2/21/2014	357	NA	NA	so	V	3	<0.99	<0.99	<2	<2	<0.99	<0.99	130	2	<9.9	<0.99	<0.99	25	<20	<0.99	<0.99	<0.99	1	<2	<0.99	<0.99	<2	Verification for potential reuse onsite
IV	#844	#844	2/21/2014	357	NA	NA	so	V	3	<0.98	<0.98	<2	<2	<0.98	<0.98	<49	2.1	<9.8	<0.98	<0.98	<20	<20	<0.98	<0.98	<0.98	<0.98	<2	<0.98	<0.98	<2	Verification for potential reuse onsite
IV	#845	#845	2/21/2014	370	NA	NA	so	V	3	<0.99	<0.99	<2	<2	<0.99	<0.99	<50	1.3	<9.9	<0.99	<0.99	<20	<20	<0.99	<0.99	<0.99	<0.99	<2	<0.99	<0.99	<2	Verification for potential reuse onsite
IV	#846	#846	2/21/2014	356	NA	NA	so	V	3	<0.98	<0.98	<2	<2	<0.98	<0.98	<49	5.1	<9.8	<0.98	<0.98	<20	<20	<0.98	<0.98	<0.98	1.4	<2	<0.98	<0.98	<2	Verification for potential reuse onsite
IV	#847	#847	2/21/2014	390	NA	NA	so	V	4	<0.94	<0.94	<1.9	<1.9	<0.94	<0.94	<47	35	<9.4	6.4	<0.94	<19	<19	<0.94	<0.94	<0.94	36	<1.9	<0.94	3.1	8.6	Verification for potential reuse onsite
IV	#848	#848	2/21/2014	370	NA	NA	so	V	3	<0.91	<0.91	<1.8	<1.8	<0.91	<0.91	<46	2.6	<9.1	<0.91	<0.91	<18	<18	<0.91	<0.91	<0.91	1.1	<1.8	<0.91	<0.91	<1.8	Verification for potential reuse onsite
IV	#849	#849	2/21/2014	369	NA	NA	so	E	3	<0.89	<0.89	<1.8	<1.8	<0.89	<0.89	160	<0.89	<8.9	<0.89	<0.89	<18	<18	<0.89	<0.89	<0.89	<0.89	<1.8	<0.89	<0.89	<1.8	Verification for potential reuse onsite
IV	#850	#850	2/21/2014	369	NA	NA	so	V	5	<0.9	<0.9	<1.8	<1.8	<0.9	<0.9	<45	1.3	<9	<0.9	<0.9	<18	<18	<0.9	<0.9	<0.9	1.1	<1.8	<0.9	<0.9	<1.8	Verification for potential reuse onsite
IV	#851	#851	2/21/2014	356	NA	NA	so	V	5	<0.88	<0.88	<1.8	<1.8	<0.88	<0.88	<44	2.2	<8.8	<0.88	<0.88	<18	<18	<0.88	<0.88	<0.88	<0.88	<1.8	<0.88	<0.88	<1.8	Verification for potential reuse onsite
IV	#852	#852	2/21/2014	343	NA	NA	so	V	5	<0.95	<0.95	<1.9	<1.9	<0.95	<0.95	<48	2.4	<9.5	<0.95	<0.95	<19	<19	<0.95	<0.95	<0.95	<0.95	<1.9	<0.95	<0.95	<1.9	Verification for potential reuse onsite
IV	#853	#853	2/21/2014	331	NA	NA	so	V	5	<0.92	<0.92	<1.8	<1.8	<0.92	<0.92	<46	2	<9.2	<0.92	<0.92	<18	<18	<0.92	<0.92	<0.92	0.93	<1.8	<0.92	<0.92	<1.8	Verification for potential reuse onsite
IV	#866	#866	2/26/2014	NA	NA	NA	so	E	1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<130	<5.1	<51	<5.1	<5.1	<51	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	Gray soil, sewer smell, adjacent Column C/Row 49, east sidewall
IV	#898	#898	3/6/2014	359	NA	NA	so	E	6	<5	<5	5.8	<5	<5	<5	<130	<5	<50	<5	<5	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5	North of Structure 563 excavation, gray soil under pad
IV	#1005	#1005	4/29/2014	NA	NA	NA	so	V	NA	<5	<5	<5	--	<5	<5	<50	<2	<50	<2	<5	<50	<50	<5	<5	<5	<2	<5	<5UJ	<2	<2	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1006	#1006	4/29/2014	NA	NA	NA	so	V	NA	<250	<250	<250	--	<250	<250	<2500	<100	<2500	<100	<250	<2500	<2500	<250	<250	<250	<100	<250	<250uj	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1007	#1007	4/29/2014	NA	NA	NA	so	V	NA	<250	<250	<250	--	<250	<250	<2500	<100	<2500	<100	<250	<2500	<2500	<250	<250	<250	<100	<250	<250UJ	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65

TABLE 5

SOIL SAMPLE RESULTS - VOCs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8260B; units in ug/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	1,1,1-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trichlorobenzene	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Dichloromethane (methylene chloride)	Ethylbenzene	Isopropylbenzene	Methyl Ethyl Ketone (MEK) (2-Butanone)	4-Methyl-2-Pentanone	n-Butylbenzene	Isopropyltoluene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylene -o	Xylene -p, -m	Remarks
IV	#1008	#1008	4/29/2014	NA	NA	NA	so	V	NA	<5	<5	<5	--	<5	<5	<50	<2	<50	<2	<5	<50	<50	<5	<5	<5	<2	<5	<5UJ	<2	<2	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1009	#1009	4/29/2014	NA	NA	NA	so	D	NA	<250	<250	3500	--	<250	<250	<2500	<100	<2500	<100	390	<2500	<2500	5000	5300	<250	<100	<250	<250UJ	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1010	#1010	4/29/2014	NA	NA	NA	so	D	NA	<250	<250	<250	--	<250	<250	<2500	<100	<2500	<100	<250	<2500	<2500	<250	770	<250	<100	<250	<250UJ	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1011	#1011	4/29/2014	NA	NA	NA	so	D	NA	<250	<250	<250	--	<250	<250	<2500	<100	<2500	<100	<250	<2500	<2500	<250	<250	<250	<100	<250	<250UJ	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1012	#1012	4/29/2014	NA	NA	NA	so	D	NA	<250	<250	320	--	<250	<250	<2500	<100	<2500	<100	<250	<2500	<2500	640	610	<250	<100	<250	<250UJ	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1013	#1013	4/29/2014	NA	NA	NA	so	D	NA	<250	<250	<250	--	<250	<250	<2500	<100	<2500	<100	<250	<2500	<2500	<250	<250	<250	<100	<250	<250UJ	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1014	#1014	4/29/2014	NA	NA	NA	so	V	NA	<250	<250	<250	--	<250	<250	<2500	<100	<2500	<100	<250	<2500	<2500	<250	<250	<250	<100	<250	<250UJ	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1015	#1015	4/29/2014	NA	NA	NA	so	D	NA	<250	<250	<250	--	<250	<250	<2500	<100	<2500	<100	<250	<2500	<2500	<250	<250	<250	<100	<250	<250UJ	<100	<100	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1032	#1032	5/14/2014	NA	NA	NA	so	V	NA	<1000	<1000	<1000	<1000	<1000	<1000	<25000	<1000	<10000	<1000	<1000	<10000	<10000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	TPH stockpiles; East end of stockpile after removing East end; stockpile near Row 65 and Column C, east end

TABLE 5

SOIL SAMPLE RESULTS - VOCs

Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility

3200 Fruitland Avenue

Vernon, California

EPA Test Method 8260B; units in ug/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Sample Matrix	Status	Sample Depth - Bottom (feet bls)	1,1,1-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trichlorobenzene	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Dichloromethane (methylene chloride)	Ethylbenzene	Isopropylbenzene	Methyl Ethyl Ketone (MEK) (2-Butanone)	4-Methyl-2-Pentanone	n-Butylbenzene	Isopropyltoluene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Xylene -o	Xylene -p, -m	Remarks
IV	#1033	#1033	5/14/2014	NA	NA	NA	so	D	NA	<1000	<1000	<1000	<1000	<1000	<1000	<26000	<1000	<10000	<1000	<1000	<10000	<10000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	TPH stockpiles; East end of stockpile after removing East end; stockpile near Row 65 and Column C, east end
IV	#1034	#1034	5/14/2014	NA	NA	NA	so	D	NA	<970	<970	<970	<970	<970	<970	<24000	<970	<9700	<970	<970	<9700	<9700	<970	<970	<970	<970	<970	<970	<970	<970	TPH stockpiles; East end of stockpile after removing East end; stockpile near Row 65 and Column C, east end
IV	#934	#934	3/24/2014	NA	NA	NA	ot	D	NA	<510	<510	12000	3400	<510	<510	<13000	<510	<5100	<510	<510	<5100	<5100	3200	2400	<510	<510	<510	<510	<510	570	Black stained substance inside sump

Note

1. Selected and detected compounds shown. For a full list of compounds, refer to the laboratory analytical reports in Appendix A.

Abbreviations

so = soil
ot = other
E = excavated
V = verification
D = disposed
< = not detected at the stated reporting limit
– = not analyzed
ug/kg = microgram per kilogram

NA = not applicable
feet bls = feet below slab
VOC = volatile organic compound

TABLE 6

SOIL SAMPLE RESULTS - METALS
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

EPA Test Method 6010/7242, units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium, Total	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury	Remarks
III	#865	#865	2/25/2014	316	NA	NA	V	so	3.5	179.5	<0.758UJ	1.17	136	0.47	<0.505	17.2	11.5	21.5	7.19	0.52	13.1	<0.758	<0.253	<0.758UJ	39.1	61.7	<0.082	Gray soil, TPH odor
IIIA	293-IV-P/S-O-003	293-O-003	5/8/2014	NA	NA	293	D	ot	6	177	<0.735UJ	5.77	99.7	0.49	2.34	22	4.69	111	123J+	171	11.6	<0.735	<0.245	<0.735	14.6	359	0.111	Sludge sample (black) from pit, South of Cooling Tower area
IIIA	574-IIIA-P/S-O-001	574-O-001	2/26/2014	NA	NA	574	D	ot	NA	NA	<10	<0.5	170	<1	9.8	270	5.6	2300	420	<5	280	<0.5	<1	<5	31	6400	0.078	Debris sample from interior of structure
IIIA	#1212	#1212	6/30/2014	NA	6a	NA	V	so	7	180	--	<0.739	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6A soil removal, verification sample, west sidewall
IIIA	#1213	#1213	6/30/2014	NA	6a	NA	V	so	7	180	--	<0.758	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6A soil removal, verification sample, west sidewall
IIIA	#1214	#1214	6/30/2014	NA	6a	NA	V	so	6	181	--	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6A soil removal, verification sample, north sidewall
IIIA	#1215	#1215	6/30/2014	NA	6a	NA	V	so	6	181	--	<0.746	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6A soil removal, verification sample, east sidewall
IIIA	#1216	#1216	6/30/2014	NA	6a	NA	V	so	7	180	--	<0.735	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6A soil removal, verification sample, east sidewall
IIIA	#1217	#1217	6/30/2014	NA	6a	NA	E	so	7	180	--	39.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6A soil removal, verification sample, south sidewall
IIIA	#1218	#1218	6/30/2014	NA	6a	NA	V	so	8	179	--	3.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6a soil removal, verification sample, bottom
IIIA	#1219	#1219	6/30/2014	NA	6a	NA	V	so	8	179	--	<0.743	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6a soil removal, verification sample, bottom
IIIA	#1220	#1220	6/30/2014	NA	6a	NA	V	so	8	179	--	0.896	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6a soil removal, verification sample, bottom
IIIA	#1090	#1090	6/3/2014	NA	7	NA	V	so	12	171	<0.75	2.47	119	0.352	<0.5	16.1	10.2	47.8	12.5	<0.25	12.5	<0.75	<0.25	<0.75	33.5	71.2	<0.0833	Verification samples for Soil Removal Area 7, bottom, south end
IIIA	#1091	#1091	6/3/2014	NA	7	NA	V	so	12	171	<0.743	1.37	103	0.29	<0.495	12.6	9.32	12	0.91	<0.248	9.34	<0.743	<0.248	<0.743	32.1	43.5	<0.0794	Verification samples for Soil Removal Area 7, bottom, center
IIIA	#1092	#1092	6/3/2014	NA	7	NA	V	so	12	171	<0.728	1.13	108	0.288	<0.485	13.3	9.87	12.9	0.671	<0.243	9.58	<0.728	<0.243	<0.728	32.6	46	<0.0806	Verification samples for Soil Removal Area 7, bottom, north end
IIIA	#1093	#1093	6/3/2014	NA	7	NA	V	so	11	172	<0.718	1.79	114	0.343	<0.478	14.7	10.3	14.2	1.18	<0.239	10.9	<0.718	<0.239	<0.718	35.2	48.4	<0.082	Verification samples for Soil Removal Area 7, west sidewall, south end
IIIA	#1094	#1094	6/3/2014	NA	7	NA	V	so	10	173	<0.721	1.69	105	0.319	<0.481	14.3	10.1	16.5	0.929	<0.24	10.4	<0.721	<0.24	<0.721	33.9	45.9	0.0862	Verification samples for Soil Removal Area 7, west sidewall, north end
IIIA	#1095	#1095	6/3/2014	NA	7	NA	V	so	10	173	<0.743	0.928	89.9	<0.248	<0.495	10.6	8.12	9.84	<0.495	<0.248	7.88	<0.743	<0.248	<0.743	28.3	37.7	<0.0806	Verification samples for Soil Removal Area 7, north sidewall, center
IIIA	#1096	#1096	6/3/2014	NA	7	NA	V	so	10	173	<0.754	1.32	111	0.34	<0.503	14.7	10.4	15.4	1.24	<0.251	11.1	<0.754	<0.251	<0.754	31	47.5	<0.0847	Verification samples for Soil Removal Area 7, east sidewall, north end
IIIA	#1097	#1097	6/3/2014	NA	7	NA	V	so	10	173	<0.735	2.84	112	0.278	<0.49	12.9	6.53	23.2	19.5	0.261	10.1	<0.735	<0.245	<0.735	21.9	52.2	0.0938	Verification samples for Soil Removal Area 7, east sidewall, south end
IIIA	#1098	#1098	6/3/2014	NA	7	NA	V	so	12	171	<0.75	1.45	120	0.367	<0.5	18.3	10	51	20	<0.25	12.3	<0.75	<0.25	<0.75	37.3	74.4	0.278	Verification samples for Soil Removal Area 7, south sidewall, center
IIIA	#864	#864	2/25/2014	NA	NA	NA	V	so	3.5	179.5	<0.735UJ	2.04	122	0.616	<0.49	18.2	11	16.8	5.78	<0.245	12.1	<0.735	<0.245	<0.735uj	38.3	46.6	0.0939	NA
IIIA	#1221	#1221	6/30/2014	NA	NA	NA	V	so	NA	NA	--	<0.758	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Stockpile from 6a removal
IIIA	#1244	#1244	7/7/2014	NA	6a	NA	V	so	7	180	--	1.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6a soil removal, collected following additional soil removal, removed to 8' depth, width approximately 5', south sidewall, east side
IIIA	#1245	#1245	7/7/2014	NA	6a	NA	V	so	7	180	--	<0.725	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 6a soil removal, collected following additional soil removal, removed to 8' depth, width approximately 5', south sidewall, east side
IIIA	W-1	W-1	10/31/2013	NA	NA	NA	E	so	0.5	186.5	<0.75	47.8	243	0.457	3.12	33.6	10.8	221	248	3.37	31.7	<0.75	0.472	<0.75	23.5	929	0.156	Railroad samples 4' West of fence, UPRR
IIIA	W-2	W-2	10/31/2013	NA	NA	NA	E	so	1.5	185.5	<0.75	40.6	180	0.402	1.9	25	11.4	149	135	1.46	26.2	<0.75	<0.25	<0.75	24.2	675	0.0839	Railroad samples 4' West of fence, UPRR
IIIA	W-24	W-24	4/3/2014	NA	NA	NA	E	so	0.5	186.5	<0.769UJ	92.3J+	255	0.322	1.63	29.8	10.9	84.6J-	165	3.17	24.5	<0.769	<0.256	<0.769	31.5	307	<0.0847	Railroad samples 4' West of fence, UPRR
IIIA	W-25	W-25	4/3/2014	NA	NA	NA	E	so	1	186	<0.75UJ	81.9J+	234	0.328	1.69	29.8	12.4	92.4J-	152	3.92	23.5	<0.75	<0.25	<0.75	30.6	344	<0.0833	Refusal at 1', UPRR
IIIA	W-51	W-51	6/26/2014	NA	NA	NA	E	so	3	184	--	63.2	--	--	--	--	--	--	1.99	--	--	--	--	--	--	--	--	5' North of Row 47, beneath Union Pacific railroad, UPRR
IIIA	W-52	W-52	6/26/2014	NA	NA	NA	V	so	3	184	--	1.34	--	--	--	--	--	--	9.49	--	--	--	--	--	--	--	--	Row 48, UPRR
IIIA	W-54	W-54	7/1/2014	NA	NA	NA	E	so	5	182	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Deeper sample at W-51, Union Pacific railroad, UPRR
IIIA	W-86	W-86	7/9/2014	NA	NA	NA	V	so	5	182	--	6.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Verification sample for removal of W-51/W-54; slope, UPRR
IIIA	W-87	W-87	7/9/2014	NA	NA	NA	V	so	5	182	--	<0.746	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Verification sample for removal of W-51/W-54; slope, UPRR
IIIA	W-88	W-88	7/9/2014	NA	NA	NA	V	so	6	181	--	<0.735	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Verification sample for removal of W-51/W-54; bottom, UPRR
IIIA	W-89	W-89	7/9/2014	NA	NA	NA	E	so	6	181	--	13.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Verification sample for removal of W-51/W-54; bottom, UPRR

TABLE 6

SOIL SAMPLE RESULTS - METALS
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

EPA Test Method 6010/7242, units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium, Total	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury	Remarks
IIIA	W-100	W-100	7/16/2014	NA	NA	NA	V	so	8	179	--	5.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Verification sample for removal of W-95, UPRR
IIIA	W-101	W-101	7/16/2014	NA	NA	NA	V	so	10	177	--	1.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Hand augered sample below W-100, UPRR
IV	#833	#833	2/20/2014	A/P	NA	NA	V	so	NA	NA	<0.721	0.965	151	0.508	<0.481	15.9	10.2	10.9	3.83	<0.24	11.4	<0.721	<0.24	<0.721	32.5	37.5	<0.0833	Stockpile from H60
IV	43-V-R/R-SS-002	43-SS-002	9/25/2013	NA	NA	43	V/E	so	0.5	186.5	<10	4.6	130	<1	2.1	18	10	27	11	<5	13	<0.5	<1	<5	45	64	0.084	Below grade in rail line E, Row 49
IV	43-V-R/R-SS-003	43-SS-003	9/25/2013	NA	NA	43	V	so	2	185	<10	3.8	130	<1	4.9	17	9.4	30	<3	<5	15	<0.5	<1	<5	42	370	0.046	Below grade in rail line, Row 49
IV	43-V-R/R-SS-004	43-SS-004	9/25/2013	NA	NA	43	V/E	so	1	186	<10	7.5	130	<1	2.2	18	10	26	30	<5	13	<0.5	<1	<5	43	78	0.052	Below grade in rail line, between Rows 46 & 47
IV	43-V-R/R-SS-005	43-SS-005	9/25/2013	NA	NA	43	V	so	2	185	<10	3.3	110	<1	1.8	14	8.5	15	<3	<5	10	<0.5	<1	<5	38	49	0.032	Below grade in rail line, between Rows 46 & 47
IV	562-IV-F/F-SS-001	562-SS-001	2/24/2014	NA	NA	562	V	so	10	173	<0.75UJ	1.12	158	0.443	<0.5	21.2	13.1	19.7	1.42	<0.25	14.7	<0.75	<0.25	<0.75UJ	43.7	58.5	<0.0833	Bottom
IV	562-IV-F/F-SS-002	562-SS-002	2/24/2014	385	NA	562	V	so	3	180	<0.758UJ	0.798	109	0.434	<0.505	16.4	10.3	15.1	4.91	<0.253	11.3	<0.758	<0.253	<0.758UJ	37.8	48.1	<0.082	South sidewall
IV	562-IV-F/F-SS-003	562-SS-003	2/24/2014	385	NA	562	V	so	5	178	<0.739UJ	1.49	124	0.486	<0.493	17.4	10.9	11.8	5.62	<0.246	11.8	<0.739	<0.246	<0.739UJ	37.1	39.2	<0.0833	South sidewall
IV	562-IV-F/F-SS-004	562-SS-004	2/24/2014	372	NA	562	V	so	3	180	<0.721UJ	0.973	87.6	0.355	<0.481	12.9	7.42	10.2	6.66	<0.24	8.37	<0.721	<0.24	<0.721UJ	31.1	33.9	<0.0806	West sidewall
IV	562-IV-F/F-SS-005	562-SS-005	2/24/2014	372	NA	562	E	so	5	178	<0.785UJ	1.82	150	0.517	<0.524	18.1	11.2	10.9	5.98	<0.262	12.3	<0.785	<0.262	<0.785UJ	38	36.7	<0.0862	West sidewall
IV	562-IV-F/F-SS-006	562-SS-006	2/24/2014	372	NA	562	V	so	3	180	<0.769UJ	1.43	129	0.505	<0.513	17.8	10.5	12	3.97	<0.256	11.8	<0.769	<0.256	<0.769UJ	38.5	43.7	<0.0847	East sidewall
IV	562-IV-F/F-SS-007	562-SS-007	2/24/2014	372	NA	562	V	so	5	178	<0.758UJ	1.49	94.5	0.316	<0.505	13.6	8.81	15.4	10.6	<0.253	9.94	<0.758	<0.253	<0.758UJ	32.5	52.5	<0.0806	East sidewall
IV	562-IV-F/F-SS-008	562-SS-008	2/24/2014	372	NA	562	V	so	3	180	<0.754UJ	1.7	118	0.439	<0.503	17	11.3	16.1	2.36	<0.251	12.1	<0.754	<0.251	<0.754UJ	40.8	52.6	<0.0847	North sidewall
IV	562-IV-F/F-SS-009	562-SS-009	2/24/2014	372	NA	562	V	so	5	178	<0.785UJ	<0.785	112	0.43	<0.524	15.8	8.38	9.65	3.06	<0.262	9.78	<0.785	<0.262	<0.785UJ	34.6	38.7	<0.0806	North sidewall
IV	563-IV-F/F-SS-001	563-SS-001	2/24/2014	ND	NA	563	V	so	10	173	<0.758UJ	<0.758	144	0.429	<0.505	19.7	12.6	18.4	1.32	<0.253	14	<0.758	<0.253	<0.758UJ	41.6	56.1	<0.0862	Bottom
IV	563-IV-F/F-SS-002	563-SS-002	2/24/2014	372	NA	563	V	so	3	180	<0.758UJ	<0.758	93.8	0.341	<0.505	13.4	9.23	12.2	1.71	<0.253	9.55	<0.758	<0.253	<0.758UJ	32.8	44	<0.0806	South sidewall
IV	563-IV-F/F-SS-003	563-SS-003	2/24/2014	372	NA	563	V	so	5	178	<0.721UJ	0.87	91.9	0.447	<0.481	15.9	8.67	10.1	5.54	<0.24	10.3	<0.721	<0.24	<0.721UJ	32.5	33.8	<0.0781	South sidewall
IV	563-IV-F/F-SS-004	563-SS-004	2/24/2014	359	NA	563	V	so	3	180	<0.728UJ	0.78	109	0.382	<0.485	14.4	8.19	12.3	12.2	<0.243	9.65	<0.728	<0.243	<0.728UJ	28.7	49.4	<0.0794	West sidewall
IV	563-IV-F/F-SS-005	563-SS-005	2/24/2014	359	NA	563	V	so	5	178	<0.743UJ	0.964	118	0.372	<0.495	12.5	9.37	11.1	4.35	<0.248	10.2	<0.743	<0.248	<0.743UJ	31.3	43.3	<0.082	West sidewall
IV	563-IV-F/F-SS-006	563-SS-006	2/24/2014	359	NA	563	V	so	3	180	<0.743UJ	1.46	104	0.357	<0.495	12.7	9.29	12.4	6.04	<0.248	10.3	<0.743	<0.248	<0.743UJ	30.6	46.9	<0.0847	North sidewall
IV	563-IV-F/F-SS-007	563-SS-007	2/24/2014	359	NA	563	V	so	5	178	<0.758UJ	1.93	142	0.552	<0.505	17	10.5	11.2	6.04	<0.253	12.8	<0.758	<0.253	<0.758UJ	38.3	41.9	<0.0833	North sidewall
IV	563-IV-F/F-SS-008	563-SS-008	2/24/2014	359	NA	563	E	so	3	180	<0.789UJ	1.9	94.4	0.309	<0.526	10.9	8.9	10.6	2.4	<0.263	9.11	<0.789	<0.263	<0.789UJ	28.7	42.8	<0.082	East sidewall
IV	563-IV-F/F-SS-009	563-SS-009	2/24/2014	359	NA	563	V	so	5	178	<0.781UJ	1.92	106	0.36	<0.521	13.1	9.28	15	12.4	<0.26	10.8	<0.781	<0.26	<0.781UJ	31.1	55	<0.0862	East sidewall

TABLE 6

SOIL SAMPLE RESULTS - METALS
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

EPA Test Method 6010/7242, units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium, Total	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury	Remarks
IV	564-IV-F/F-SS-001	564-SS-001	2/24/2014	NA	NA	564	E	so	10	173	<0.785UJ	2.19	129	0.428	<0.524	15.6	11.3	12.6	3.61	<0.262	12.3	<0.785	<0.262	<0.785UJ	35.5	48.1	<0.0794	Bottom
IV	564-IV-F/F-SS-002	564-SS-002	2/24/2014	346	NA	564	V	so	3	180	<0.761UJ	1.07	123	0.522	<0.508	16.9	9.22	12.1	10.2	<0.254	12.1	<0.761	<0.254	<0.761UJ	35.8	44.9	<0.0847	East sidewall
IV	564-IV-F/F-SS-003	564-SS-003	2/24/2014	346	NA	564	V	so	5	178	<0.761UJ	1.42	97.7	0.336	<0.508	11.7	9.45	11.7	1.52	<0.254	9.92	<0.761	<0.254	<0.761UJ	31.3	45.1	<0.0862	East sidewall
IV	564-IV-F/F-SS-004	564-SS-004	2/24/2014	359	NA	564	V	so	3	180	<0.743UJ	<0.743	85.9	0.321	<0.495	9.69	6.79	8.65	10.7	<0.248	7.3	<0.743	<0.248	<0.743UJ	21.4	37.5	<0.0862	South sidewall
IV	564-IV-F/F-SS-005	564-SS-005	2/24/2014	359	NA	564	V	so	5	178	<0.781UJ	0.936	130	0.372	<0.521	15.3	11.2	15.6	3	<0.26	12.5	<0.781	<0.26	<0.781UJ	35	52.6	<0.0847	South sidewall
IV	564-IV-F/F-SS-006	564-SS-006	2/24/2014	346	NA	564	V	so	3	180	<0.739UJ	0.879	104	0.343	<0.493	11.7	8.92	11.5	1.85	<0.246	9.65	<0.739	<0.246	<0.739UJ	28.7	42.7	<0.0909	West sidewall
IV	564-IV-F/F-SS-007	564-SS-007	2/24/2014	346	NA	564	V	so	5	178	<0.75UJ	1.74	106	0.352	<0.5	11.9	9.2	10.9	2.22	<0.25	9.86	<0.75	<0.25	<0.75UJ	29.7	43.3	0.0955	West sidewall
IV	564-IV-F/F-SS-008	564-SS-008	2/24/2014	NA	NA	564	V	so	3	180	<0.754UJ	1.15	131	0.5	<0.503	16.1	10.6	11.5	14	<0.251	12	<0.754	<0.251	<0.754UJ	35.5	42.5	<0.0847	North sidewall
IV	564-IV-F/F-SS-009	564-SS-009	2/24/2014	346	NA	564	V	so	5	178	<0.743UJ	1.12	124	0.446	<0.495	14.1	9.91	12.2	11.2	<0.248	10.9	<0.743	<0.248	<0.743UJ	33.2	46.7	<0.0833	North sidewall
IV	566-IV-F/F-SS-001	566-SS-001	2/24/2014	383	NA	566	V	so	3	180	<0.75UJ	0.931	129	0.491	<0.5	15.4	8.22	11.8	4.75	<0.25	10.3	<0.75	<0.25	<0.75UJ	33.5	38.5	<0.0833	South sidewall
IV	566-IV-F/F-SS-002	566-SS-002	2/24/2014	384	NA	566	V	so	5	178	<0.777UJ	2.49	289	0.63	<0.518	20.2	13.1	21.6	7.44	<0.259	14.8	<0.777	<0.259	<0.777UJ	44.4	65	<0.0806	South sidewall
IV	566-IV-F/F-SS-003	566-SS-003	2/24/2014	NA	NA	566	V	so	10	173	<0.761UJ	1.88	118	0.455	<0.508	17.7	10.6	16.2	9.75	<0.254	12.4	<0.761	<0.254	<0.761UJ	37	52.1	<0.0877	South Wall
IV	566-IV-F/F-SS-004	566-SS-004	2/24/2014	370	NA	566	V	so	3	180	<0.777UJ	1.65	111	0.378	<0.518	15.4	9.84	14.9	7.58	<0.259	10.8	<0.777	<0.259	<0.777UJ	35.7	60.7	<0.0833	West sidewall
IV	566-IV-F/F-SS-005	566-SS-005	2/24/2014	370	NA	566	V	so	5	178	<0.761UJ	<0.761	83.8	0.426	<0.508	14.5	7.42	8.94	3.37	<0.254	9.07	<0.761	<0.254	<0.761UJ	34	31.9	<0.0877	West sidewall
IV	566-IV-F/F-SS-006	566-SS-006	2/24/2014	371	NA	566	V	so	3	180	<0.765UJ	1.45	115	0.399	<0.51	16	9.95	15.9	9.36	<0.255	10.9	<0.765	<0.255	<0.765UJ	36.4	63.4	0.102	East sidewall
IV	566-IV-F/F-SS-007	566-SS-007	2/24/2014	371	NA	566	V	so	5	178	<0.765UJ	1.07	129	0.476	<0.51	16.7	9.81	9.85	4.2	<0.255	11.2	<0.765	<0.255	<0.765UJ	34.9	31.8	<0.0794	East sidewall
IV	566-IV-F/F-SS-008	566-SS-008	2/24/2014	370	NA	566	V	so	3	180	<0.765UJ	4.19	111	0.374	<0.51	16.1	9.48	44.6	41.8	0.299	11.7	<0.765	<0.255	<0.765UJ	35.4	108	<0.082	North sidewall
IV	566-IV-F/F-SS-009	566-SS-009	2/24/2014	371	NA	566	V	so	5	178	<0.777UJ	<0.777	159	<0.259	<0.518	13.8	4.6	6.28	94.3	<0.259	5.01	<0.777	<0.259	<0.777UJ	17.8	29.2	<0.0833	North sidewall
IV	567-IV-F/F-SS-001	567-SS-001	2/24/2014	345	NA	567	V	so	10	173	<0.758UJ	1.49	147	0.401	<0.505	17.4	12.2	18.6	1.62	<0.253	13.5	<0.758	<0.253	<0.758UJ	34.8	55.7	<0.0862	Bottom
IV	567-IV-F/F-SS-002	567-SS-002	2/24/2014	344	NA	567	V	so	5	178	<0.765UJ	<0.765	94.9	0.313	<0.51	10.7	7.41	31.4	6.27	<0.255	8.2	<0.765	<0.255	<0.765UJ	21.9	39.3	<0.0862	West sidewall
IV	567-IV-F/F-SS-003	567-SS-003	2/24/2014	344	NA	567	V	so	5	178	<0.761UJ	1.5	94.8	0.333	<0.508	12	8.13	14.4	5.3	<0.254	8.84	<0.761	<0.254	<0.761UJ	26.5	39.5	<0.0847	North sidewall
IV	567-IV-F/F-SS-004	567-SS-004	2/24/2014	344	NA	567	V	so	3	180	<0.75UJ	2.19	88.3	0.317	<0.5	10.9	7.81	16.7	4.87	<0.25	8.3	<0.75	<0.25	<0.75UJ	24.4	41.7	<0.0833	West sidewall
IV	567-IV-F/F-SS-005	567-SS-005	2/24/2014	345	NA	567	V	so	3	180	<0.758UJ	0.912	92.9	0.286	<0.505	9.62	6.31	14.6	44.9	<0.253	6.99	<0.758	<0.253	<0.758UJ	17.9	63.4	<0.0781	East sidewall

TABLE 6

SOIL SAMPLE RESULTS - METALS
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

EPA Test Method 6010/7242, units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium, Total	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury	Remarks
IV	567-IV-F/F-SS-006	567-SS-006	2/24/2014	345	NA	567	V	so	5	178	<0.785UJ	1.46	132	0.377	<0.524	16.3	11.7	17	2.11	<0.262	12.6	<0.785	<0.262	<0.785UJ	34.4	53.1	<0.0862	East sidewall
IV	567-IV-F/F-SS-007	567-SS-007	2/24/2014	344	NA	567	V	so	3	180	<0.732UJ	0.999	107	0.352	<0.488	11.6	7.28	10.2	20	<0.244	8.18	<0.732	<0.244	<0.732UJ	21.4	48.2	<0.0909	South sidewall
IV	567-IV-F/F-SS-008	567-SS-008	2/24/2014	345	NA	567	V	so	5	178	<0.781UJ	1.67	123	0.364	<0.521	15.6	11	26.4	3.43	<0.26	12	<0.781	<0.26	<0.781UJ	32.9	53.1	<0.0877	South sidewall
IV	567-IV-F/F-SS-009	567-SS-009	2/24/2014	345	NA	567	V	so	3	180	<0.721UJ	0.789	91.9	0.323	<0.481	10.4	6.72	9.27	12.1	<0.24	7.34	<0.721	<0.24	<0.721UJ	19.1	48	<0.0847	North sidewall
IV	568-IV-F/F-SS-001	568-SS-001	2/24/2014	NA	NA	568	V	so	10	173	<0.773UJ	1.19	136	0.392	<0.515	16.1	11.7	17.1	1.62	<0.258	12.7	<0.773	<0.258	<0.773UJ	33.6	54.3	<0.0833	Bottom
IV	568-IV-F/F-SS-002	568-SS-002	2/24/2014	357	NA	568	V	so	3	180	<0.746UJ	1.99	113	0.349	<0.498	12.7	8.54	14.1	11.1	<0.249	10.3	<0.746	<0.249	<0.746UJ	27.1	64.7	<0.082	West sidewall
IV	568-IV-F/F-SS-003	568-SS-003	2/24/2014	357	NA	568	V	so	5	178	<0.769UJ	2.1	104	0.336	<0.513	13.2	9.36	17.9	15.1	<0.256	10.3	<0.769	<0.256	<0.769UJ	29	60.8	0.326	West sidewall
IV	568-IV-F/F-SS-004	568-SS-004	2/24/2014	357	NA	568	V	so	3	180	<0.781UJ	1.71	136	0.498	<0.521	16.1	9.72	12.2	6.48	<0.26	11.1	<0.781	<0.26	<0.781UJ	35	44	<0.082	North sidewall
IV	568-IV-F/F-SS-005	568-SS-005	2/24/2014	358	NA	568	V	so	5	178	<0.735UJ	1.28	84.5	0.291	<0.49	10.6	8.15	17	3.43	<0.245	8.5	<0.735	<0.245	<0.735UJ	25	42.9	<0.082	North sidewall
IV	568-IV-F/F-SS-006	568-SS-006	2/24/2014	371	NA	568	V	so	3	180	<0.769UJ	2.13	137	0.384	<0.513	13.3	8.08	20.4	24.5	<0.256	9.07	<0.769	<0.256	<0.769UJ	25.6	53.4	<0.0769	South sidewall
IV	568-IV-F/F-SS-007	568-SS-007	2/24/2014	371	NA	568	V	so	5	178	<0.785UJ	1.01	101	0.342	<0.524	13.4	8.79	14.9	10.6	<0.262	9.3	<0.785	<0.262	<0.785UJ	27.5	50.4	<0.0833	South sidewall
IV	568-IV-F/F-SS-008	568-SS-008	2/24/2014	358	NA	568	V	so	3	180	<0.743UJ	0.895	94.3	0.329	<0.495	10.7	6.58	12.4	35.1	<0.248	7.71	<0.743	<0.248	<0.743UJ	20.1	53.2	<0.0877	East sidewall
IV	568-IV-F/F-SS-009	568-SS-009	2/24/2014	358	NA	568	V	so	5	178	<0.777UJ	0.8	102	0.443	<0.518	14.2	7.62	8.37	3.04	<0.259	9.18	<0.777	<0.259	<0.777UJ	30.9	31.3	<0.0833	East sidewall
IV	570-IV-P/S-O-001	570-O-001	2/25/2014	NA	NA	570	V	ot	NA	NA	<0.743UJ	15.3	113	0.366	<0.495	15	8.92	72.6	18.6	<0.248	12.9	<0.743	<0.248	<0.743UJ	29.8	87.7	<0.0794	Gray Material inside structure
IV	615-IV-P/S-O-001	615-O-001	3/11/2014	NA	NA	615	D	ot	NA	NA	<0.758	30.7	95.6	0.402	9.26	101	12.2	962	1640	0.787	13.4	<0.758	<0.253	<0.758	28.2	931	0.0921	Oily and metal shavings inside structure
IV	642-IV-P-O-001	642-O-001	3/20/2014	NA	NA	642	D	ot	4.5	178.5	<10	54	130	<1	<1	28	15	320	74	<5	22	<0.5	<1	<5	78	690	0.1	Reddish brown sludge
IV	648-IV-P/S-O-001	648-O-001	3/25/2014	NA	NA	648	D	ot	NA	NA	<0.758UJ	7.02	83.3j	<0.253	5.13	113	14.9	176	367	2.42	200	<0.758	0.268	<0.758	9.81	742	0.128	Black sludge in bottom of structure
IV	#949	#949	3/31/2014	351	NA	676	V	so	3	180	<0.735	<0.735	33	<0.245	<0.49	6.89	0.896	5.62	7.47	<0.245	1.72	<0.735	<0.245	<0.735	16.1	9.18	<0.0806	Beige asphalt/brick, Row 53, 30' West of Column G
IV	696-IV-P/S-SS-001	696-SS-001	4/2/2014	NA	NA	696	D	so	NA	NA	<0.739	<0.739	126	0.501	<0.493	20.3	10.3	18.5	20.7	<0.246	11	<0.739	<0.246	<0.739	31.6	53	<0.0847	Black, hydrocarbon odor
IV	696-IV-P/S-SS-002	696-SS-002	4/2/2014	NA	NA	696	D	so	NA	NA	<0.746	1.26	96.3	0.336	<0.498	12.3	8.29	13.1	26.7	<0.249	8.94	<0.746	<0.249	<0.746	28.7	49.4	<0.0833	Black, hydrocarbon odor
IV	715-IV-P/S-O-001	715-O-001	4/9/2014	NA	NA	715	D	ot	NA	NA	<0.725	1.72	80.3	0.291	<0.483	10.4	7.17	13.3	9.87	<0.242	7.96	<0.725	<0.242	<0.725	25.2	40.9	<0.0806	Black-stained, hydrocarbon
IV	715-IV-P/S-O-002	715-O-002	4/16/2014	NA	NA	715	D	ot	NA	NA	<0.777	4.85	86.5	<0.259	<0.518	29.6	4.63	250	38.3	2.95	253	<0.777	<0.259	<0.777	19.6	151	<0.0833	Black oily sludge from internal sump

TABLE 6

SOIL SAMPLE RESULTS - METALS
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

EPA Test Method 6010/7242, units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium, Total	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury	Remarks
IV	742-IV-P/S-O-001	742-O-001	4/15/2014	NA	NA	742	D	ot	NA	NA	<0.75	5.41	240	1.04	3.6	119	10.2	1710	4300	4.74	45.3	<0.75	0.536	<0.75	43.1	2210	0.133	Sediment inside structure
IV	748-IV-P/S-O-001	748-O-001	4/16/2014	NA	NA	748	D	ot	NA	NA	<0.758	3.36	102	0.271	<0.505	15.8	8.44	31.2	25.7	2.5	25.5	<0.758	<0.253	<0.758	28.2	73.8	<0.0862	Black oily sludge from on top of structure
IV	754-IV-P/S-O-001	754-O-001	4/17/2014	NA	NA	754	C	ot	NA	NA	<0.781	1.7	95.9	0.382	<0.521	15	8.44	22.4	22.1	<0.26	9.46	<0.781	<0.26	<0.781	31.4	68.3	<0.0833	Gray/black sediment inside vault
IV	757-IV-P/S-O-001	757-O-001	4/17/2014	NA	NA	757	D	ot	NA	NA	<0.739	<0.739	25.2	<0.246	<0.493	4.48	3.01	10.5	112	<0.246	3.71	<0.739	<0.246	<0.739	11.4	36.7	<0.0833	Gray/green sediment inside vault
IV	777-IV-P/S-O-001	777-O-001	4/21/2014	NA	NA	777	D	ot	NA	NA	<0.754	1.41	52.7	<0.251	0.665	6.63	1.71	37.2	48.7	0.296	3.87	<0.754	<0.251	<0.754	8.44	38.3	<0.0794	Sediment (black) inside sump
IV	801-IV-P/S-SS-001	801-SS-001	5/13/2014	NA	NA	801	V	so	6	177	--	2.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Beneath structure footprint, center
IV	809-IV-P/S-O-002	809-O-002	5/7/2014	NA	NA	809	C	ot	NA	NA	<0.746	0.94	25.1	<0.249	<0.498	5.57	1.2	61.5	10.5	0.502	3.23	<0.746	<0.249	<0.746	6.83	13.7	<0.0806	Black sediment inside structure
IV	849-IV-P/S-SS-001	849-SS-001	5/13/2014	NA	NA	849	V	so	10	173	<0.761	0.949	140	0.42	<0.508	16.6	11.6	19.9	3.63	0.31	12.7	<0.761	<0.254	<0.761	35.8	55.3	<0.0877	Beneath structure footprint, north end
IV	849-IV-P/S-SS-002	849-SS-002	5/13/2014	358	NA	849	V	so	8	175	<0.761	0.812	132	0.371	<0.508	15.8	11.3	17	2	<0.254	12.3	<0.761	<0.254	<0.761	34.3	50.6	<0.0877	Beneath structure footprint, south end
IV	849-IV-P/S-O-001	849-O-001	5/7/2014	NA	NA	849	D	ot	NA	NA	<0.769	2.49	103	0.627	<0.513	22.9	9.31	616	89.3	0.336	12	<0.769	<0.256	<0.769	36.2	949	<0.0833	White & green material inside structure with metal shavings
IV	849-IV-P/S-O-002	849-O-002	5/7/2014	NA	NA	849	D	ot	NA	NA	<0.75	2.28	94.1	0.289	<0.5	13.6	8.23	195	14.4	<0.25	10.7	<0.75	<0.25	<0.75	29.6	141	<0.0833	Black sediment inside structure
IV	855-IV-P/S-O-001	855-O-001	5/8/2014	NA	NA	855	C	ot	NA	NA	<0.714UJ	1.27	112	0.411	<0.476	14.8	9.92	24.7	6.98J+	0.261	11.2	<0.714	<0.238	<0.714	30.9	72	<0.0877	Black sediment inside vault
IV	876-IIIB-O-O-001	876-O-001	5/19/2014	NA	NA	876	D	ot	NA	NA	<0.758	0.975	42.2	0.558	<0.505	8.53	3.8	62.4	15.8	5.67	6.51	<0.758	<0.253	<0.758	12.2	96	<0.082	Black material inside structure
IV	#934	#934	3/24/2014	NA	NA	NA	D	ot	NA	NA	<0.732UJ	1.31	91.1J	0.299	<0.488	11.2	7.97	29.1	8.54	<0.244	8.96	<0.732	<0.244	<0.732	24.4	59.4	<0.0862	Black stained substance inside sump
IV	#834	#834	2/20/2014	384	NA	NA	V	so	NA	NA	<0.728	1.19	98.2	0.411	<0.485	12.7	8.48	9.87	6.81	<0.243	9.24	<0.728	<0.243	<0.728	26.9	36.9	<0.0833	Stockpile sample, light brown/rusty, Row 60 /10' East of Column H
IV	#835	#835	2/20/2014	NA	NA	NA	D	so	NA	NA	<0.777	<0.777	155	0.606	<0.518	20.6	11.9	16	10.4	<0.259	12.4	<0.777	<0.259	<0.777	41.3	78.5	<0.0862	Stockpile from Column H/Row 60
IV	#836	#836	2/21/2014	330	NA	NA	ND	so	2.5	180.5	<0.773UJ	0.891	129	0.46	<0.515	16.7	11.1	18.8	2.76	0.451	12.6	<0.773	<0.258	<0.773	36.8	53.9	<0.0758	Verification for potential reuse onsite
IV	#837	#837	2/21/2014	331	NA	NA	V	so	2.5	180.5	<0.769UJ	0.792	97.2	0.276	<0.513	12.7	9.07	13	4.38	<0.256	9.49	<0.769	<0.256	<0.769	27.8	47.1	0.286	Verification for potential reuse onsite
IV	#838	#838	2/21/2014	344	NA	NA	V	so	2.75	180.25	<0.743UJ	3.08	109	0.394	<0.495	13.5	9.07	14.5	3.67	0.576	14.9	<0.743	<0.248	<0.743	32.7	1170	<0.0794	Verification for potential reuse onsite
IV	#839	#839	2/21/2014	343	NA	NA	V	so	3	180	<0.761UJ	0.895	128	0.466	<0.508	17.4	11.4	17.5	3.88	1.02	12.9	<0.761	<0.254	<0.761	39	56.7	0.142	Verification for potential reuse onsite
IV	#840	#840	2/21/2014	344	NA	NA	V	so	5	178	<0.769UJ	1.2	121	0.382	<0.513	14.7	10.1	49.1	8.44	<0.256	11.3	<0.769	<0.256	<0.769	31.7	64.6	0.0795	Verification for potential reuse onsite
IV	#841	#841	2/21/2014	343	NA	NA	V	so	3	180	<0.75UJ	1.12	131	0.462	<0.5	16.4	10.8	18.6	2.28	0.533	12.5	<0.75	<0.25	<0.75	36.7	54.4	<0.0833	Verification for potential reuse onsite
IV	#842	#842	2/21/2014	357	NA	NA	V	so	5	178	<0.754UJ	0.766	48.2	<0.251	<0.503	5.45	5.14	5.22	0.519	<0.251	4.42	<0.754	<0.251	<0.754	16.4	24.7	<0.0833	Verification for potential reuse onsite
IV	#843	#843	2/21/2014	357	NA	NA	V	so	3	180	<0.758UJ	1.95	122	0.432	<0.505	16.9	10.7	25.4	10.6	0.4	12	<0.758	<0.253	<0.758	36.6	93	<0.0877	Verification for potential reuse onsite
IV	#844	#844	2/21/2014	357	NA	NA	V	so	3	180	<0.777UJ	1.89	105	0.365	<0.518	13.5	9.37	14.2	2.17	<0.259	10.3	<0.777	<0.259	<0.777	30.2	45.2	<0.0806	Verification for potential reuse onsite
IV	#845	#845	2/21/2014	370	NA	NA	V	so	3	180	<0.773UJ	2.97	101	0.321	<0.515	11.7	7.07	13.8	5.4	0.358	14.5	<0.773	<0.258	<0.773	32.8	39.3	<0.082	Verification for potential reuse onsite
IV	#846	#846	2/21/2014	356	NA	NA	V	so	3	180	<0.758UJ	2.49	132	0.477	<0.505	17.4	11.8	18.2	4.33	0.503	12.8	<0.758	<0.253	<0.758	39.8	61.9	<0.0877	Verification for potential reuse onsite
IV	#847	#847	2/21/2014	390	NA	NA	V	so	4	179	<0.785UJ	5.72	213	0.52	<0.524	25	12.3	31.8	5.88	<0.262	18.6	<0.785	<0.262	<0.785	43.9	61.5	<0.082	Verification for potential reuse onsite
IV	#848	#848	2/21/2014	370	NA	NA	V	so	3	180	<0.765UJ	2.69	132	0.474	<0.51	17.1	11.6	18.5	2.63	0.605	12.8	<0.765	<0.255	<0.765	38.3	59	<0.0746	Verification for potential reuse onsite
IV	#849	#849	2/21/2014	369	NA	NA	E	so	3	180	<0.75UJ	1.96	135	0.488	<0.5	17.9	11.2	18.6	5.62	0.93	12.9	<0.75	<0.25	<0.75	40.9	62.4	0.128	Verification for potential reuse onsite
IV	#850	#850	2/21/2014	369	NA	NA	V	so	5	178	<0.765UJ	1.74	126	0.46	<0.51	17.5	11.7	17.8	2.3	0.844	13	<0.765	<0.255	<0.765	39.5	56.7	<0.0806	Verification for potential reuse onsite
IV	#851	#851	2/21/2014	356	NA	NA	V	so	5	178	<0.789UJ	2.15	132	0.475	<0.526	17.7	11.8	18	3.27	0.392	13.1	<0.789	<0.263	<0.789	39.9	59.2	0.241	Verification for potential reuse onsite
IV	#852	#852	2/21/2014	343	NA	NA	V	so	5	178	<0.781UJ	<0.781	115	0.396	<0.521	14.9	10.5	14.5	2.28	0.401	11.1	<0.781	<0.26	<0.781	33.8	50.8	<0.0735	Verification for potential reuse onsite
IV	#853	#853	2/21/2014	331	NA	NA	V	so	5	178	<0.739UJ	1.11	100	0.34	<0.493	12.2	8.98	12.2	1.42	<0.246	9.18	<0.739	<0.246	<0.739	29.4	43.9	<0.0725	Verification for potential reuse onsite
IV	#935	#935	3/24/2014	487	NA	NA	V	so	4	179	<0.75UJ	1.14	76.7J+	0.411	<0.5	12.6	7.56	9.53	5.05	<0.25	8.09	<0.75	<0.25	<0.75	27.6	33.4	<0.0833	10' South of Column G/Row 63; brownish red soil

TABLE 6

SOIL SAMPLE RESULTS - METALS
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

EPA Test Method 6010/7242, units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium, Total	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury	Remarks
IV	#992	#992	4/28/2014	NA	NA	NA	D	so	NA	NA	<0.75	2.21	119	0.416	0.511	15.9	11.1	18.7	4.19	0.589	11.9	<0.75	<0.25	<0.75	37.5	55.2	<0.0847	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#993	#993	4/28/2014	NA	NA	NA	V	so	NA	NA	<0.746	2.01	118	0.411	0.516	15.8	10.9	18.4	4.2	0.334	11.9	<0.746	<0.249	<0.746	36.4	55	<0.082	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#994	#994	4/28/2014	NA	NA	NA	V	so	NA	NA	<0.758	1.94	118	0.426	0.514	16.5	10.9	19.9	52.5	0.562	12.1	<0.758	<0.253	<0.758	37.2	67.9	<0.082	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#995	#995	4/28/2014	NA	NA	NA	V	so	NA	NA	<0.75	3.21	125	0.384	0.615	16	10.8	20.3	11.8	0.457	12	<0.75	<0.25	<0.75	35	68.1	<0.0847	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#996	#996	4/28/2014	NA	NA	NA	V	so	NA	NA	<0.746	2.66	124	0.423	0.627	17.1	11.6	21	13.4	0.447	13	<0.746	<0.249	<0.746	38	77	<0.0862	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#997	#997	4/28/2014	NA	NA	NA	D	so	NA	NA	<0.754	2.1	127	0.358	0.512	17	11.7	18.3	3.46	<0.251	12.8	<0.754	<0.251	<0.754	36	55.8	<0.0847	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
IV	#1005	#1005	4/29/2014	NA	NA	NA	V	so	NA	NA	<10	2.9	120	<1	<1	15	10	24	19	<5	12	<0.5	<1	<5	40	80J+	0.066	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1006	#1006	4/29/2014	NA	NA	NA	V	so	NA	NA	<10	1.4	89	<1	<1	12	8.3	14	7.9	<5	8.7	<0.5	<1	<5	33	61J+	0.044	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1007	#1007	4/29/2014	NA	NA	NA	V	so	NA	NA	<10	1.8	84	<1	<1	10	7.2	12	8.4	<5	7.8	<0.5	<1	<5	29	74J+	0.058	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1008	#1008	4/29/2014	NA	NA	NA	V	so	NA	NA	<10	1.7	94	<1	<1	12	7.7	14	8.4	<5	8.5	<0.5	<1	<5	33	57J+	0.036	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1009	#1009	4/29/2014	NA	NA	NA	D	so	NA	NA	<10	1.5	120	<1	<1	15	10	18	5.9	<5	12	<0.5	<1	<5	40	71J+	0.16	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1010	#1010	4/29/2014	NA	NA	NA	D	so	NA	NA	<10	1	81	<1	<1	11	7.6	14	7.2	<5	8.4	<0.5	<1	<5	31	59J+	0.032	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1011	#1011	4/29/2014	NA	NA	NA	D	so	NA	NA	<10	0.75	63	<1	<1	9.1	6	23	7	<5	7.2	<0.5	<1	<5	25	65J+	0.058	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1012	#1012	4/29/2014	NA	NA	NA	D	so	NA	NA	<10	1.8	87	<1	<1	12	7.6	21	8.9	<5	9.5	<0.5	<1	<5	31	66J+	0.046	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1013	#1013	4/29/2014	NA	NA	NA	D	so	NA	NA	<10	2.1	110	<1	<1	14	9.5	17	9.1	<5	11	<0.5	<1	<5	38	72J+	0.044	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1014	#1014	4/29/2014	NA	NA	NA	R	so	NA	NA	<10	2.2	100	<1	<1	12	8.2	15	5	<5	9.5	<0.5	<1	<5	35	50J+	0.036	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1015	#1015	4/29/2014	NA	NA	NA	D	so	NA	NA	<10	1.3	90	<1	<1	11	6.6	23	8.2	<5	8.7	<0.5	<1	<5	29	52J+	<0.02	Stockpile samples from potentially impacted hydrocarbon stockpile near Column C/Row 65
IV	#1016	#1016	5/5/2014	305	NA	NA	D	so	NA	NA	<0.765	1.74	36.1	<0.255	<0.51	24.9	3.17	8.69	4.68	0.944	31.8	<0.765	<0.255	<0.765	47.3	161	<0.0833	Between Column C and H at Row 47; pinkish, fibrous soil, below slab
IV	#1017	#1017	5/7/2014	307	NA	NA	V	so	1	182	<0.75	1.82	138	0.498	<0.5	17.6	10.9	12.5	10.4	<0.25	11.5	<0.75	<0.25	<0.75	39	54.8	<0.082	Column D/Row 47; reddish-brown soil encountered during foundation/footing removal
IV	#1018	#1018	5/13/2014	NA	NA	NA	D	so	NA	NA	<0.732	1.48	119	0.338	0.954	13.7	9.03	213	364	<0.244	11.5	<0.732	<0.244	<0.732	27.6	200	0.203	Stockpile sample. Between Columns F and G, stockpile of Cu-impacted debris layer, near Row 53
IV	#1123	#1123	6/5/2014	NA	NA	NA	V	so	10	173	--	1.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 9a, area of soil removals became 10' deep due to footings removed immediately adjacent to Area 9 beneath structure
IV	#1124	#1124	6/5/2014	NA	NA	NA	V	so	10	173	--	3.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Area 9b, area of soil removals became 10' deep due to footings removed immediately adjacent to Area 9 beneath structure
IV	#1250	#1250	7/16/2014	NA	NA	NA	V	so	0	183	<0.746UJ	<0.746	148	0.417	<0.498	15.7	8.64	13.9	8.45	<0.249	10.4	<0.746	<0.249	<0.746	34.3	47.7J-	<0.0847	Stockpile sample of golden brown material
VI	#1047	#1047	5/21/2014	NA	12	NA	V	so	2.5	184.5	<0.75UJ	5.64	128	0.458	<0.5	17.9	11.9	25.4J+	11	0.354	13.3	<0.75	<0.25	<0.75	38.4	843	0.0969	Area 12 soil. Floor of excavation
VI	#1048	#1048	5/21/2014	NA	12	NA	V	so	2.5	180.5	<0.761UJ	95.9	134	0.413	<0.508	19.2	12.3	29.5J+	17.9	<0.254	14.3	<0.761	<0.254	<0.761	38.2	87.7	<0.082	Area 12 Soil removal verification samples, south sidewall
VI	#1049	#1049	5/21/2014	NA	12	NA	E	so	2.5	180.5	<0.781UJ	28.9	110	0.352	<0.521	17.7	10.5	25.7J+	33.8	<0.26	12.6	<0.781	<0.26	<0.781	34.2	136	<0.082	Area 12 Soil removal verification samples, east sidewall
VI	#1050	#1050	5/21/2014	NA	12	NA	V	so	2.5	180.5	<0.765UJ	1.79	145	0.502	<0.51	17.4	12.1	21.2J+	2.45	0.386	13.3	<0.765	<0.255	<0.765	39.5	57.6	<0.082	Area 12 Soil removal verification samples, north sidewall
VI	#1051	#1051	5/21/2014	NA	12	NA	E	so	2.5	180.5	<0.758UJ	13.9	115	0.391	<0.505	18.3	10.1	51.8J+	31	<0.253	13.7	<0.758	<0.253	<0.758	32.8	167	<0.0833	Area 12 Soil removal verification samples, west sidewall
VI	885-IV-R/R-SS-001	885-SS-001	5/21/2014	NA	NA	885	E	so	4	179	<0.732UJ	11.2	112	0.302	<0.488	17.6	9.87	24.9J+	44.9	<0.244	11.4	<0.732	<0.244	<0.732	32.1	115	<0.0794	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-002	885-SS-002	5/21/2014	NA	NA	885	V	so	4	179	<0.758UJ	2.59	126	0.357	0.772	17.8	11.4	23.1J+	26	<0.253	12.3	<0.758	<0.253	<0.758	35.6	221	<0.0877	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-003	885-SS-003	5/21/2014	NA	NA	885	V	so	4	179	<0.743UJ	6.35	118	0.597	<0.495	101	9.59	375J+	43.8	0.548	21.6	<0.743	<0.248	<0.743	31.7	929	0.0832	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.

TABLE 6

SOIL SAMPLE RESULTS - METALS
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

EPA Test Method 6010/7242, units in mg/kg

Phase	Sample ID	Map Reference ID	Date Sampled	Concrete Removal Area or Grid	Soil Removal Area	Associated Structure Number	Status	Sample Matrix	Sample Depth - Bottom (feet bls)	Sample Elevation (MSL)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium, Total	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury	Remarks
VI	885-IV-R/R-SS-004	885-SS-004	5/21/2014	NA	NA	885	V	so	4	179	<0.758UJ	4.43	129	0.352	<0.505	16.2	11	26.2J+	41.3	0.331	13	<0.758	<0.253	<0.758	35.2	152	0.0911	Collected below rail line and ballast from Column G to almost Column H; along southern fence line.
VI	885-IV-R/R-SS-005	885-SS-005	5/21/2014	NA	NA	885	V	so	4	179	<0.75UJ	5.6	122	0.374	<0.5	19	10.8	63.6J+	11.1	<0.25	12.2	<0.75	<0.25	<0.75	32.3	182	<0.0833	Collected below rail line and ballast from Column G to almost Column H; along southern fence line
VI	885-IV-R/R-SS-006	885-SS-006	5/21/2014	NA	NA	885	V	so	4	179	<0.743	4.5	105	0.303	<0.495	13.5	10	15.3	1.54	<0.248	10.2	<0.743	<0.248	<0.743	30.2	50	<0.0794	Collected below rail line and ballast from Column G to almost Column H; along southern fence line
VI	885-IV-R/R-SS-007	885-SS-007	5/21/2014	NA	NA	885	E	so	4	179	<0.714	21.9	176	0.39	<0.476	19.2	11.6	42.8	175	<0.238	14.1	<0.714	<0.238	<0.714	36.6	248	<0.0847	Collected below rail line and ballast from Column G to almost Column H; along southern fence line
VI	885-IV-R/R-SS-008	885-SS-008	5/29/2014	NA	NA	885	V	so	5	178	<0.746UJ	4.74	178	0.484	<0.498	22.1	15.1	26	1.86	0.44	17.1	<0.746	<0.249	<0.746	42.9	61	<0.0833	At SS-001, deeper
VI	885-IV-R/R-SS-009	885-SS-009	5/29/2014	NA	NA	885	V	so	6	177	<0.746UJ	2.31	128	0.42	<0.498	15.8	10.8	17.7	1.8	<0.249	12.1	<0.746	<0.249	<0.746	36	49.6	<0.082	At SS-001, deeper
VI	885-IV-R/R-SS-010	885-SS-010	5/29/2014	NA	NA	885	V	so	5	178	<0.75UJ	1.37	128	0.348	<0.5	15.2	10.6	14.9	1.9	<0.25	11.2	<0.75	<0.25	<0.75	33.2	50.8	<0.0847	At SS-002, deeper
VI	885-IV-R/R-SS-011	885-SS-011	5/29/2014	NA	NA	885	V	so	6	177	<0.739UJ	1.78	142	0.469	<0.493	16.4	10.9	19.2	2.65	<0.246	12.4	<0.739	<0.246	<0.739	35.9	47.2	<0.0847	At SS-002, deeper
VI	885-IV-R/R-SS-012	885-SS-012	5/29/2014	NA	NA	885	V	so	5	178	<0.732UJ	1.01	104	0.311	<0.488	12.8	8.94	13.1	1.33	<0.244	9.59	<0.732	<0.244	<0.732	29.3	42.3	<0.082	At SS-003, deeper
VI	885-IV-R/R-SS-013	885-SS-013	5/29/2014	NA	NA	885	V	so	6	177	<0.75UJ	1.2	115	0.36	<0.5	15.3	10.1	15	2.97	<0.25	11	<0.75	<0.25	<0.75	35.7	51	<0.0794	At SS-003, deeper
VI	885-IV-R/R-SS-014	885-SS-014	5/29/2014	NA	NA	885	V	so	5	178	<0.718UJ	2.13	115	0.321	<0.478	13.7	9.84	15	7.95	<0.239	10.6	<0.718	<0.239	<0.718	30.7	101	<0.0806	At SS-004, deeper
VI	885-IV-R/R-SS-015	885-SS-015	5/29/2014	NA	NA	885	V	so	6	177	<0.735UJ	2.12	116	0.354	<0.49	14.2	9.83	14.5	1.32	<0.245	10.8	<0.735	<0.245	<0.735	32.6	45.1	<0.0833	At SS-004, deeper
VI	885-IV-R/R-SS-016	885-SS-016	5/29/2014	NA	NA	885	V	so	5	178	<0.773UJ	1.05	120	0.344	<0.515	14.6	10.6	14.3	1.28	<0.258	11.4	<0.773	<0.258	<0.773	32.2	46.3	<0.0833	At SS-005, deeper
VI	885-IV-R/R-SS-017	885-SS-017	5/29/2014	NA	NA	885	V	so	6	177	<0.75UJ	1.22	131	0.348	<0.5	15.5	10.8	15.5	1.29	<0.25	11.8	<0.75	<0.25	<0.75	33.2	46.6	<0.0833	At SS-005, deeper
VI	885-IV-R/R-SS-018	885-SS-018	5/29/2014	NA	NA	885	V	so	5	178	<0.75UJ	7.68	158	0.425	<0.5	19.5	13.3	19.8	2.92	<0.25	15	<0.75	<0.25	<0.75	39.9	60.5	<0.0847	At SS-007, deeper
VI	885-IV-R/R-SS-019	885-SS-019	5/29/2014	NA	NA	885	V	so	6	177	<0.739UJ	8.55	179	0.464	<0.493	21.6	14.5	24.5	2.17	0.286	16.5	<0.739	<0.246	<0.739	42.2	78	<0.082	At SS-007, deeper
VI	#990	#990	4/28/2014	NA	NA	NA	D	so	NA	NA	<0.721	2.98	117	0.399	0.532	15.7	10.9	19.2	12.3	0.342	11.9	<0.721	<0.24	<0.721	35.3	59.7	<0.082	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d
VI	#991	#991	4/28/2014	NA	NA	NA	D	so	NA	NA	<0.739	2.58	122	0.423	0.597	16.4	11.2	20.7	11.5	0.443	12.2	<0.739	<0.246	<0.739	37.6	65.3	<0.0847	Stockpile samples - stockpile soil associated with structure removal in Areas of 9a, 9b, 9d

Abbreviations
so = soil
< = not detected at the stated reporting limit
-- = not analyzed
NA = not applicable
feet bls = feet below slab/surface
mg/kg = milligram per kilogram
J = estimated concentration
J+ = estimated concentration potentially biased high
J- = estimated concentration potentially biased low
UJ = analyte was not detected at a level greater than or equal to the adjusted reporting limit, however, the reported adjusted reporting limit is approximate
C = crushed on site for reuse
D = disposed
E = excavated
E/V = verification sample but excavated

TABLE 7

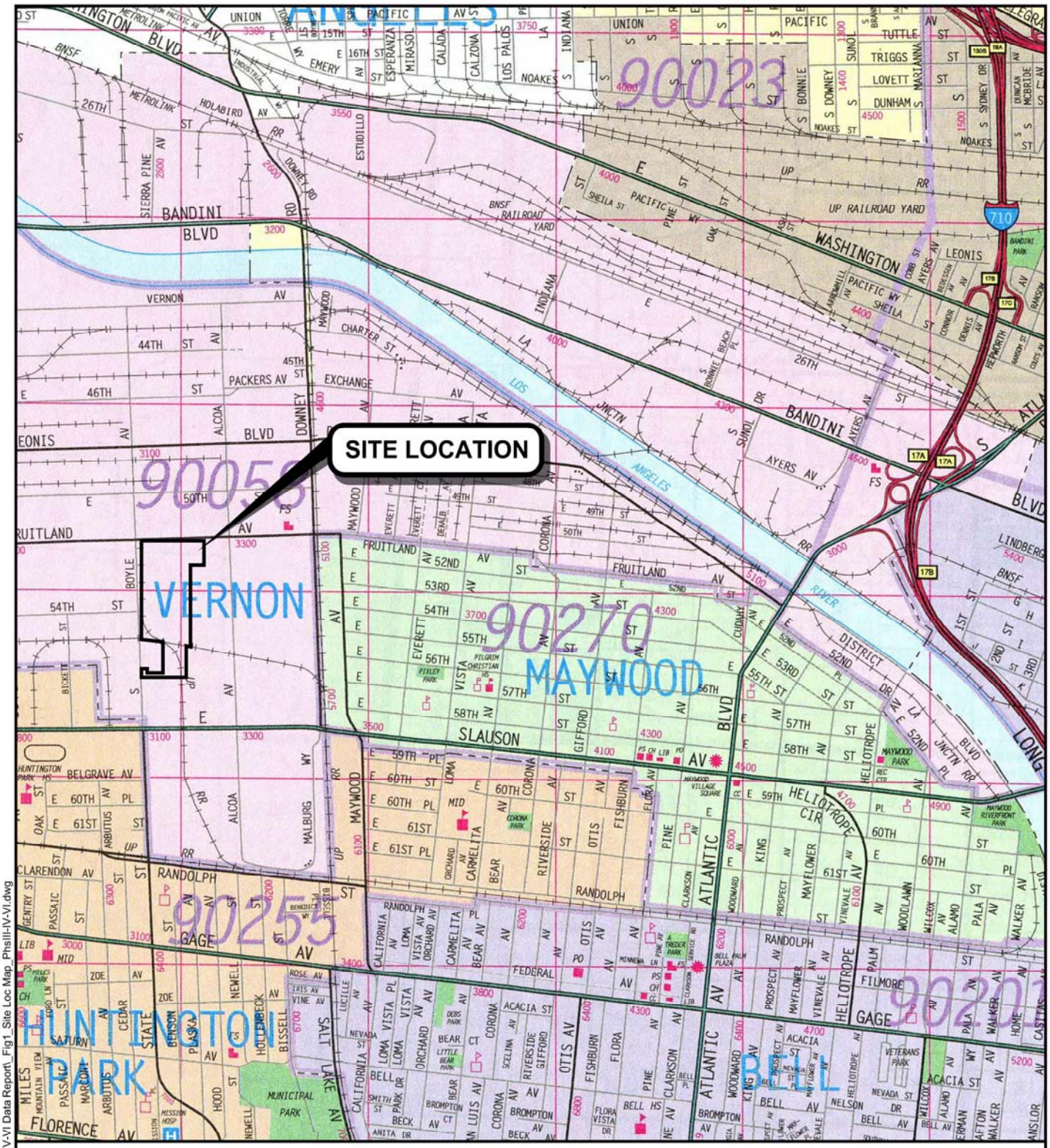
QUANTITIES OF MATERIALS REMOVED FROM THE FACILITY
Phase III, IV, and VI Areas - Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

Waste Contents[1]	Type of Waste[2]	Quantity[3]	Quantity Units	Disposal Facility	Location
PCB-Impacted Concrete	TSCA-Hazardous Waste, PCBs, Solid[4]	638	tons	US Ecology	Nevada
PCB-Impacted Soil	TSCA-Hazardous Waste, PCBs, Solid	123	tons	US Ecology	Nevada
Lead Impacted Soil	Non-RCRA Hazardous Waste Solid	346	tons	South Yuma County Landfill	Arizona
Refractory Brick	Non-RCRA Hazardous Waste Solid (NORM Waste)	228	tons	US Ecology	Nevada

Notes
1. Waste stream generated during below grade demolition and soil removal activities.
2. Federal and/or California Waste Category.
3. Quantities are approximate. Final quantities will be provided in the final completion report.
4. Bulk PCB Remediation Waste.

Abbreviations
TSCA = Toxic Substances Control Act
RCRA = Resource Conservation and Recovery Act
NORM = Naturally Occurring Radioactive Material
PCBs = polychlorinated biphenyls

FIGURES



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N

0 1,000 2,000

Approximate scale in feet

SITE LOCATION MAP
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: jrw	Date: 10/07/14	Project No. 10627.003
amec		Figure 1

Plot Date: 10/07/2014 6:46:08 PM, Plotted by: pat.herring
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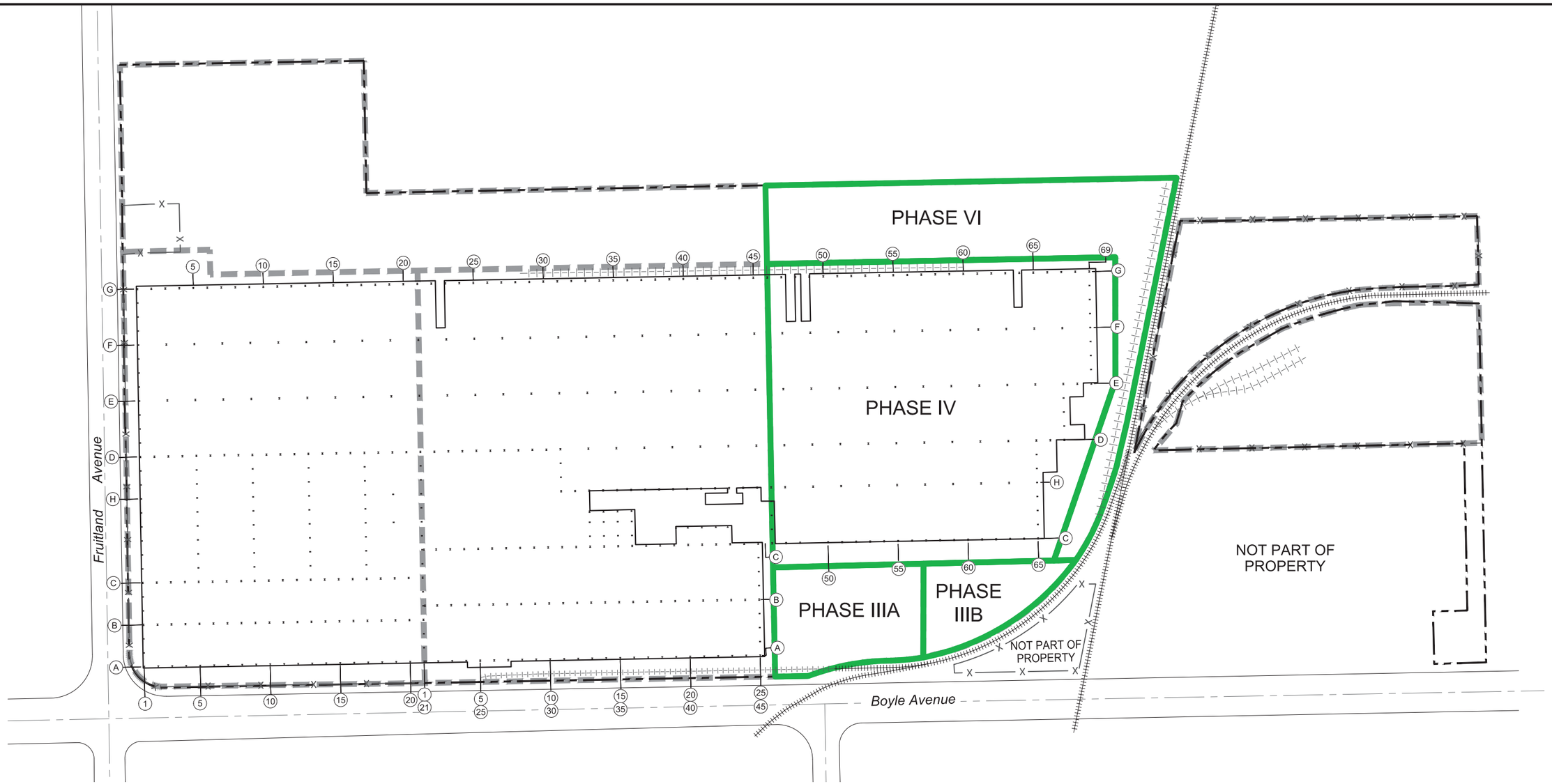

Explanation

- Site boundary
- Phase IIIA, IIIB, IV, and VI boundaries
- Phasing area boundary
- Chain link fence
- Railroad tracks (at grade)
- Railroad tracks (buried)
- Railroad tracks (destroyed)
- Building pad and footings
- (69) (G) Column and row numbering system for footings

Notes:

1. Northern portion of Phase VI is not included in this report.
2. All locations are approximate.

0 75 150
Approximate scale in feet

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002; Aluminum Company of America "Works General-MPA" Figure dated October 10, 1984; Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958; surveys conducted May 31, 2006 and June 6, 2006 by CalVada Surveyors; and surveys conducted October 12, 2011 and September 10, 2013 by Dulin & Boynton.

SITE PLAN
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: jrw	Date: 10/07/14	Project No. 10627.003
amec		Figure 2

Plot Date: 10/08/2014 2:01:36 PM, Plotted by: pat.herring
Drawing Path: Y:\10627.003.0\acad\Reports-2014\Phase III-IV-VI Data Report_Fig2_Site Plan.dwg, Phases III-IV-VI

Plot Date: 10/08/2014 1:57:50 PM, Plotted by: pat.herring
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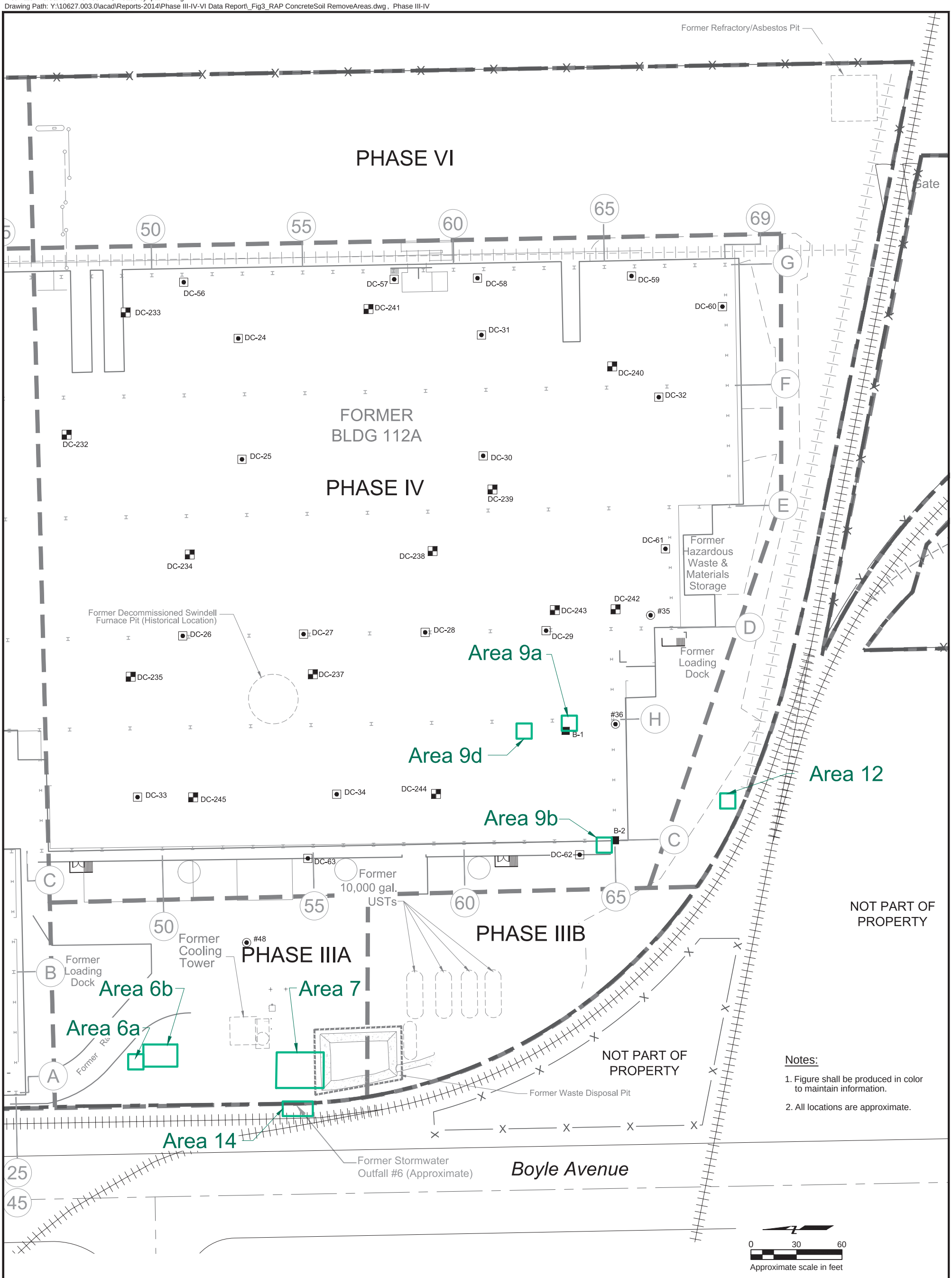


Notes:

1. Figure shall be produced in color to maintain information.
2. All locations are approximate.

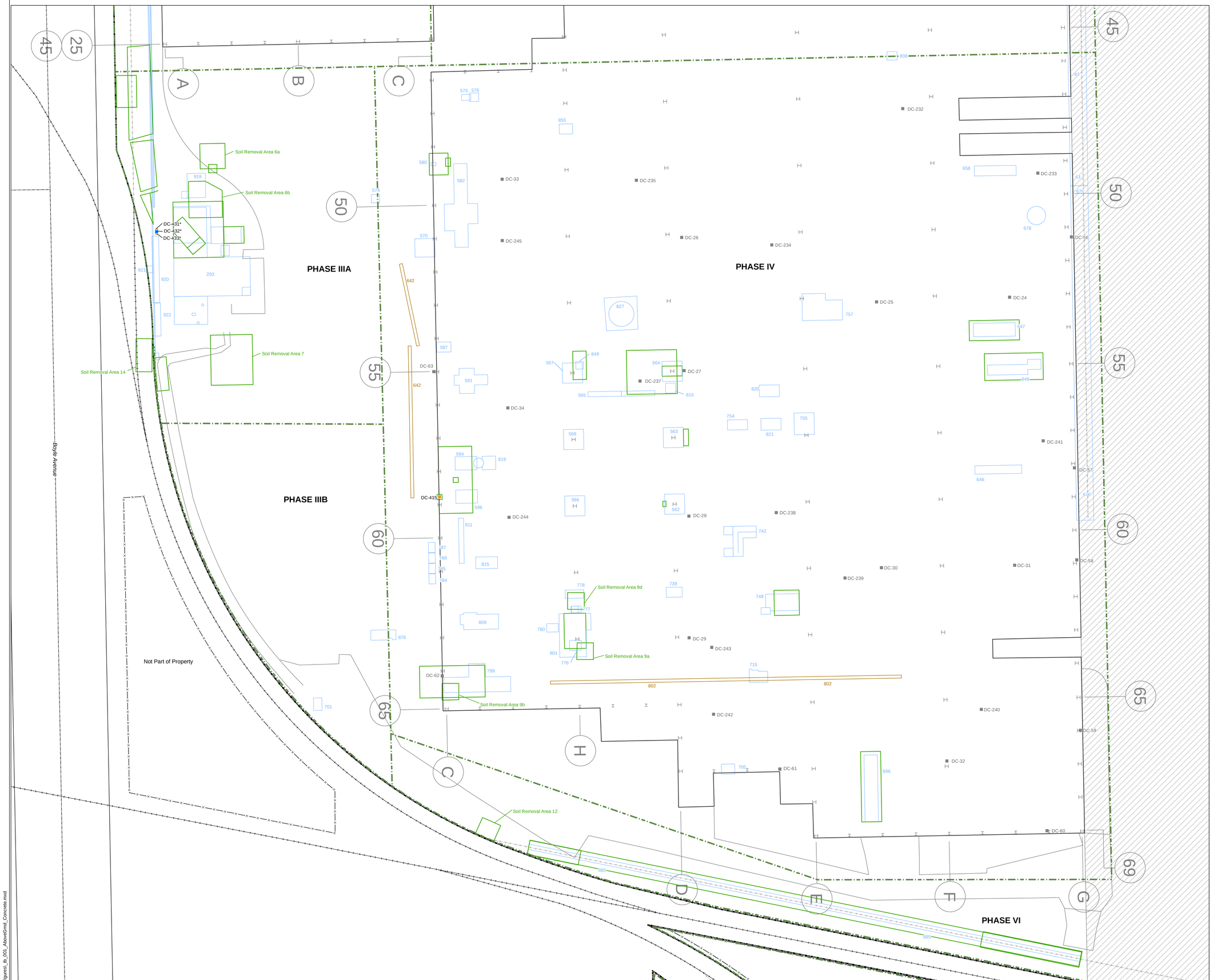
Explanation

- DC-60 — Concrete core sample (Geomatrix, 2006c and AMEC Geomatrix, 2009 and 2010)
- #48 — Soil boring with concrete core sample (Geomatrix, 2006a and 2006b)
- B-2 — Concrete core sample (MFG, 1998)
- DC-245 — Additional concrete locations sampled and analyzed for PCB Aroclors using EPA Method 8082 (September and October 2010)
- 69 G — Column and row numbering system for footings
- Site boundary
- Phasing area boundary
- Chain link fence
- Building pad and footings
- Concrete area
- Railroad tracks (at grade)
- Railroad tracks (buried)
- BLDG — Building designation
- Approximate area of excavation

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002; Geraghty & Miller, Inc. "Groundwater Elevation and Volatile Organic Compound Concentrations December 8, 1994" Figure dated February 2, 1995; Aluminum Company of America "Works General-MPA" Figure dated October 10, 1984; and Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958.

RAP SOIL REMOVAL AREAS
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: jrw	Date: 10/07/14	Project No. 10627.003
amec		Figure 3



Explanation

Concrete Samples Collected During Below Grade Demolition

- PCB concentrations detected less than or equal to 1 mg/kg
- PCB concentrations detected greater than 1 mg/kg and less than 50 mg/kg
- Concrete samples (pre-demolition)
- Soil removal area
- Phase boundary
- Chain link fence
- Railroad tracks (at grade, pre-demolition)
- Railroad tracks (buried, pre-demolition)
- Site boundary
- Pavement area
- (1) (B) Column and row numbering system
- Footing

PCBs Total polychlorinated biphenyls

mg/kg Milligrams per kilogram

* Samples are not in-situ; collected after structure was removed

Notes:

1. All locations are approximate.
2. Concrete samples collected in the Phase III area are relative to elevation of 182 feet above MLS. Concrete samples collected in the Phase IV area are relative to elevation of 183 feet above MLS. Concrete samples collected in Phase VI are relative to elevations of survey dated January 11, 2010.

20 10 0 20

Approximate Scale in Feet

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002; Aluminum Company of America "Works General-MPA" figure dated October 10, 1984; Los Angeles County Assessor's Office Parcel Map 63/105Sheet 8 dated November 5, 1958; surveys conducted May 31, 2006 and June 6, 2006 by CalVada Surveyors; and surveys conducted October 12, 2011, September 10, 2013, March 24, 2014, May 28, 2014, June 17, 2014, and July 24, 2014 by Dulin & Boynton.

ABOVEGROUND CONCRETE SLAB
SAMPLE LOCATIONS
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: pah	Date: 10/07/14	Project No. 10627.003
amec		Figure 4

Note: Figure shall be produced in color to maintain information.

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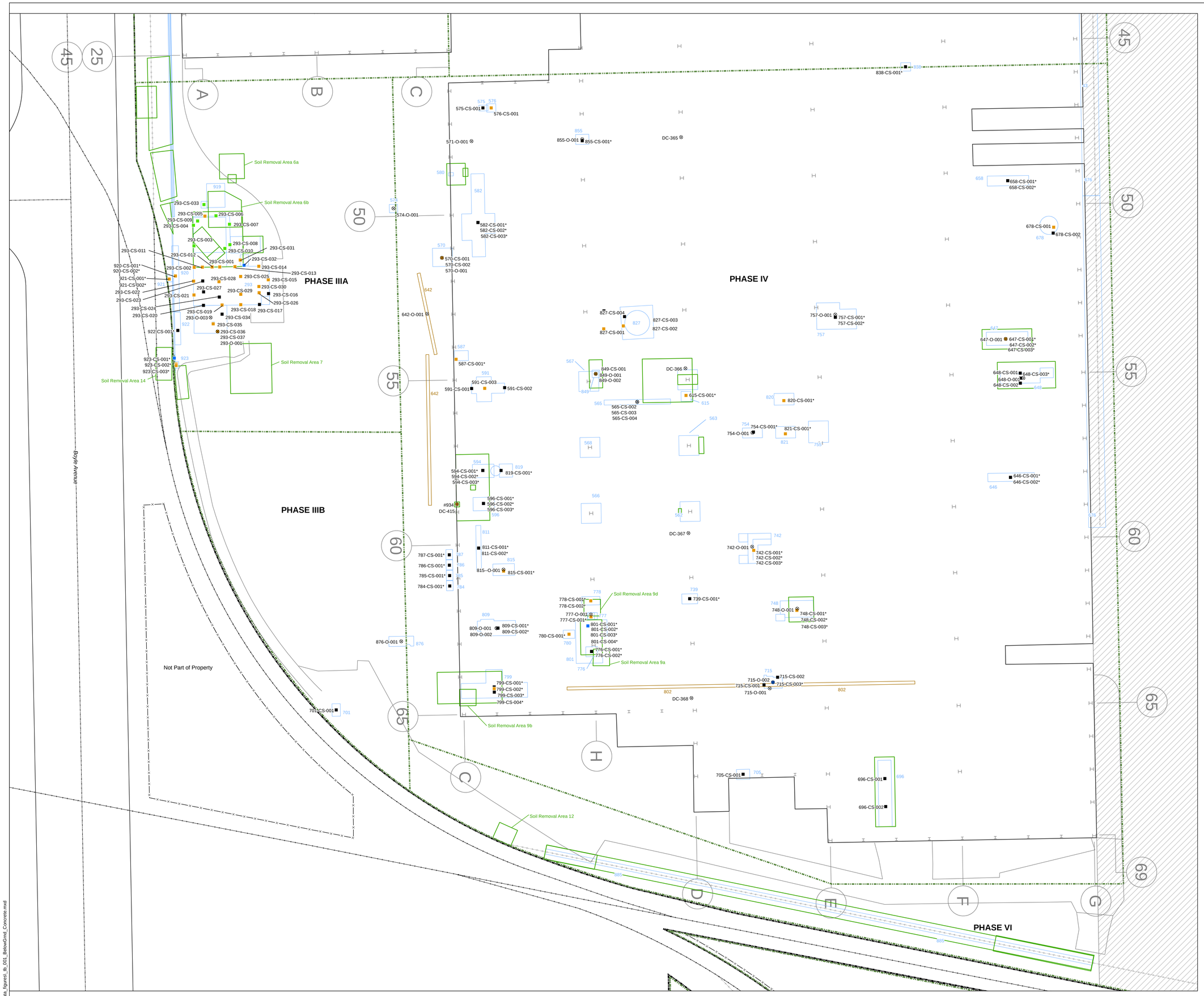

Explanation

Concrete Samples Collected During Below Grade Demolition

- PCB concentrations not detected
- PCB concentrations detected less than or equal to 1 mg/kg
- PCB concentrations detected greater than 1 mg/kg and less than 50 mg/kg
- PCB concentrations detected greater than or equal to 50 mg/kg and less than 1000 mg/kg
- Samples collected of other materials. Refer to tables for more information.
- Soil removal area
- Approximate location of buried structure or footing within structure member listed
- Below grade piping
- Phase boundary
- Chain link fence
- Railroad tracks (at grade, pre-demolition)
- Railroad tracks (buried, pre-demolition)
- Site boundary
- Pavement area
- (1) (B) Column and row numbering system
- Footing
- PCBs Total polychlorinated biphenyls
- mg/kg Milligrams per kilogram
- ★ Samples are not in-situ; collected after structure was removed

Notes:

1. All locations are approximate.
2. Concrete samples collected in the Phase III area are relative to elevation of 182 feet above MLS. Concrete samples collected in the Phase IV area are relative to elevation of 183 feet above MLS. Concrete samples collected in Phase VI are relative to elevations of survey dated January 11, 2010.

20 10 0 20
Approximate Scale in Feet

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002; Aluminum Company of America "Works General-MPA" figure dated October 10, 1984; Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958; surveys conducted May 31, 2006 and June 6, 2006 by CalVada Surveyors; and surveys conducted October 12, 2011, September 10, 2013, March 24, 2014, May 28, 2014, June 17, 2014, and July 24, 2014 by Dulin & Boynton.

BELOW GRADE CONCRETE
SAMPLE LOCATIONS
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: pah	Date: 10/07/14	Project No. 10627.003
amec		Figure 5

Note: Figure shall be produced in color to maintain information.

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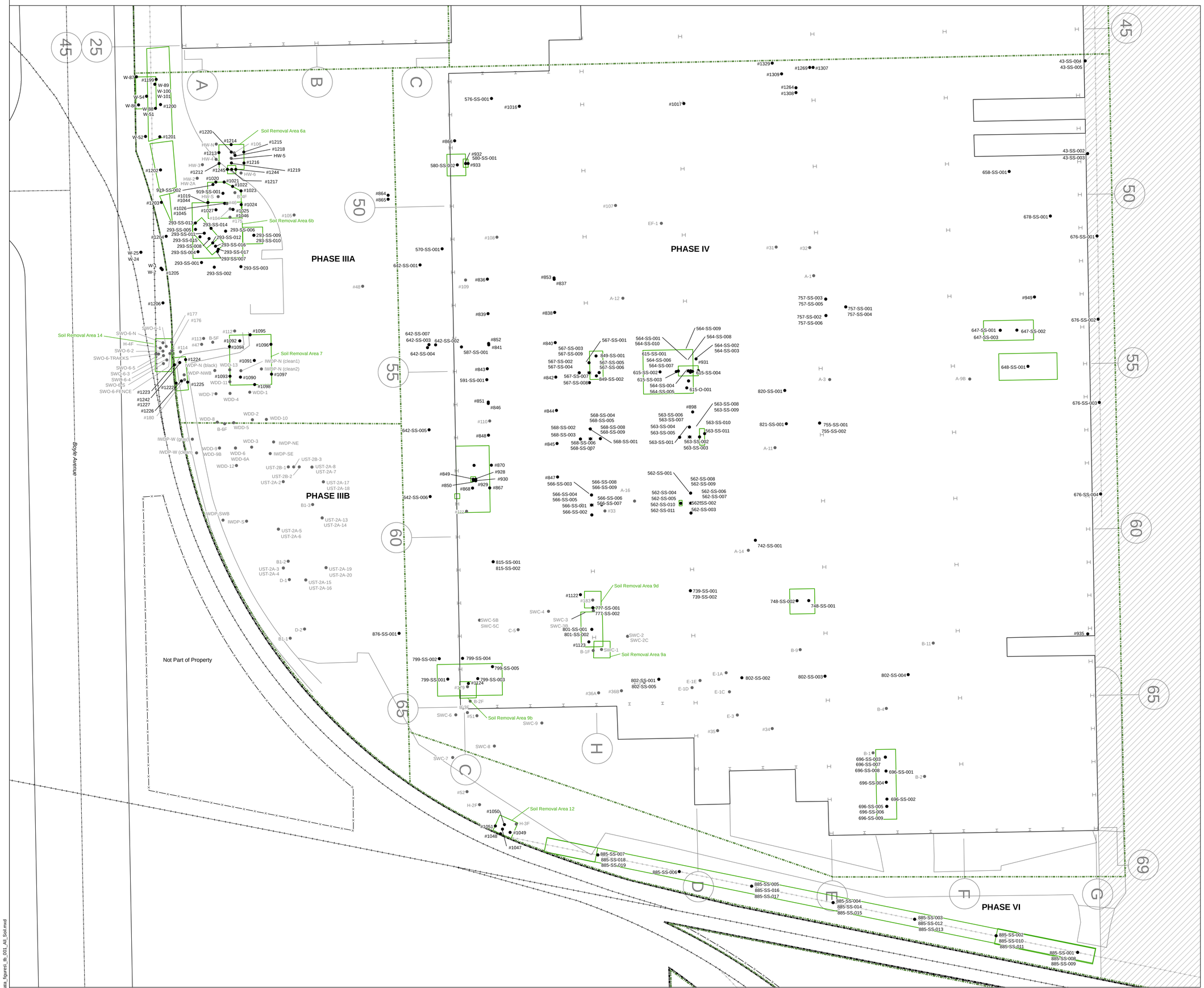

Explanation

- Soil sample location - sampled prior 2013
- Soil sample location - sampled in 2013 or 2014
- Soil removal area
- Phase boundary
- Chain link fence
- Railroad tracks (at grade, pre-demolition)
- Railroad tracks (buried, pre-demolition)
- Site boundary
- Pavement area
- Column and row numbering system
- Footing

Note:

All locations are approximate.

20 10 0 20

Approximate Scale in Feet

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002; Aluminum Company of America "Works General-MPA" figure dated October 10, 1984; Los Angeles County Assessor's Office Parcel Map 63/10/Sheet 8 dated November 5, 1958; surveys conducted May 31, 2006 and June 6, 2006 by CalVada Surveyors; and surveys conducted October 12, 2011, September 10, 2013, March 24, 2014, May 28, 2014, June 17, 2014, and July 24, 2014 by Dulin & Boynton.

SOIL SAMPLE LOCATIONS
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: pah	Date: 10/07/14	Project No. 10627.003
amec		Figure 6

Note: Figure shall be produced in color to maintain information.

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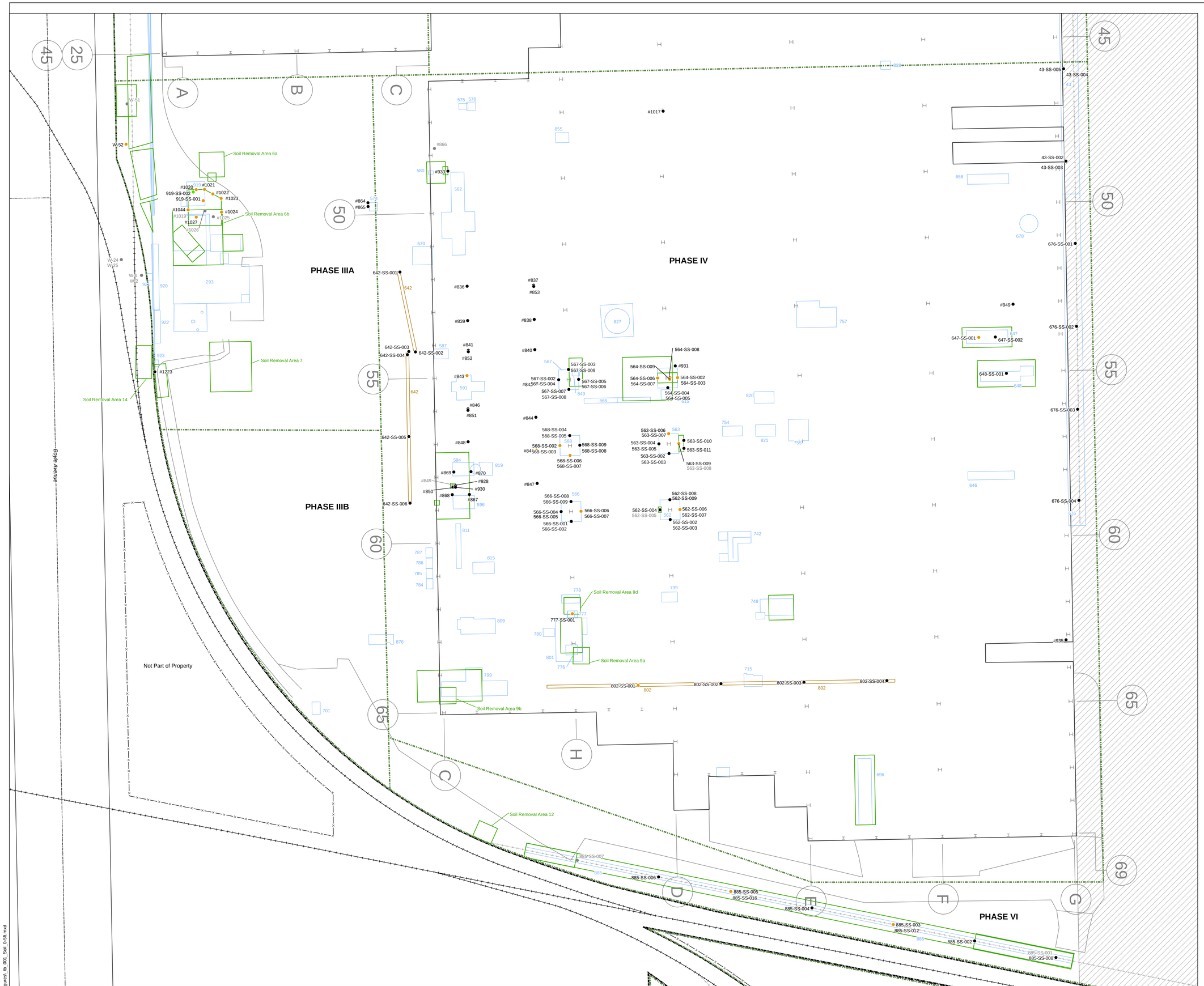


Explanation

Soil Samples Collected During Below Grade Demolition

- PCB concentrations not detected
- PCB concentrations detected less than 3.5 mg/kg
- PCB concentrations detected greater than or equal to 3.5 mg/kg
- Soil samples excavated
- Soil removal area
- Approximate location of buried structure or footing within structure member listed
- Below grade piping
- Phase boundary
- Chain link fence
- Railroad tracks (at grade, pre-demolition)
- Railroad tracks (buried, pre-demolition)
- Site boundary
- Pavement area
- (1) (B) Column and row numbering system
- Footing

PCBs Total polychlorinated biphenyls

mg/kg Milligrams per kilogram

Notes:

1. All locations are approximate.
2. Soil samples collected in the Phase III area are relative to elevation of 182 feet above MLS. Soil samples collected in the Phase IV area are relative to elevation of 183 feet above MLS. Soil samples collected in Phase VI are relative to elevations of survey dated January 11, 2010.

20 10 0 20

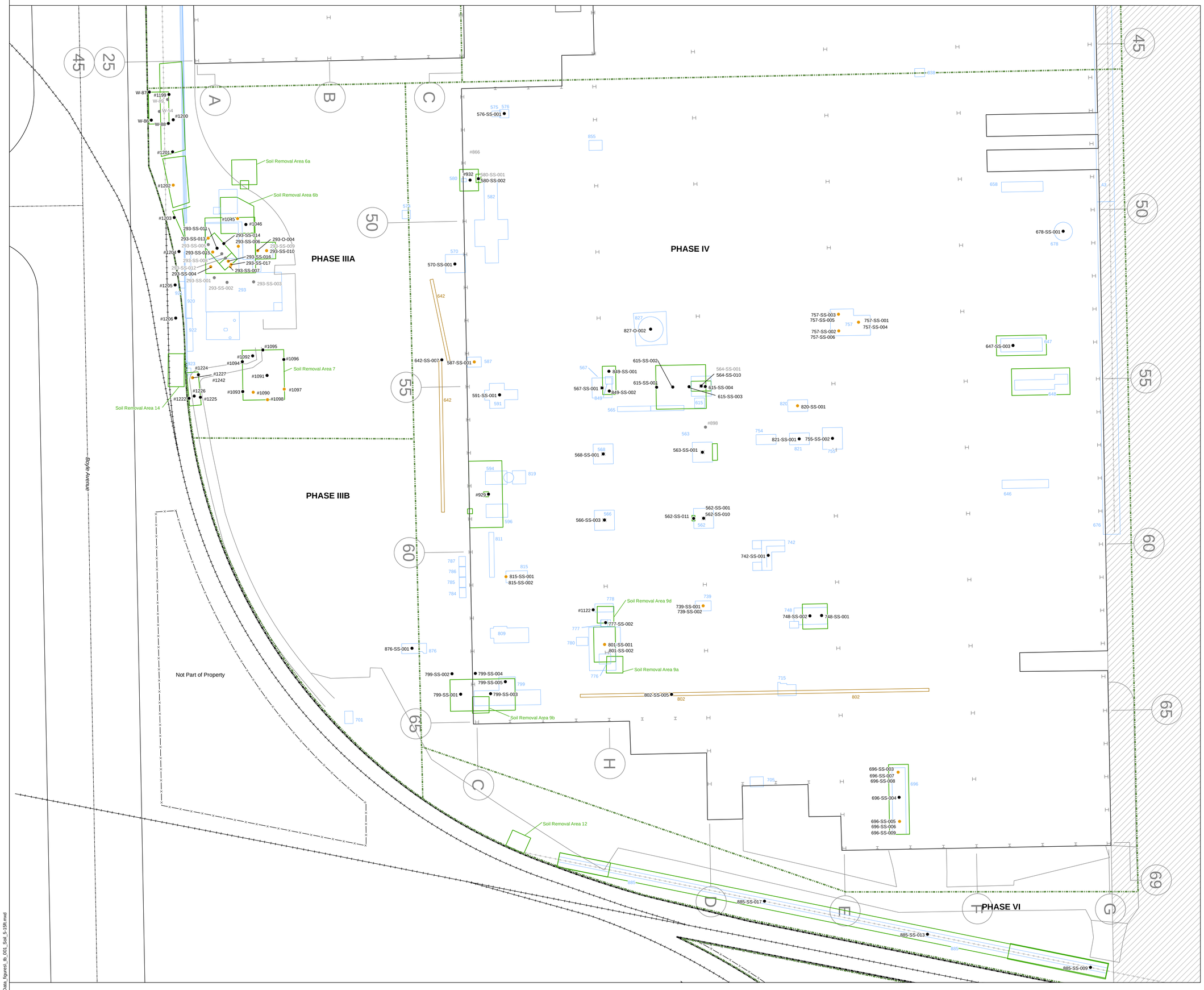
Approximate Scale in Feet

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002; Aluminum Company of America "Works General-MPA" figure dated October 10, 1984; Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958; surveys conducted May 31, 2006 and June 6, 2006 by CalVada Surveyors; and surveys conducted October 12, 2011, September 10, 2013, March 24, 2014, May 28, 2014, June 17, 2014, and July 24, 2014 by Dulin & Boynton.

SOIL REMOVAL AREAS AND SAMPLE LOCATIONS
FOR 0 TO 5 FEET
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: pah	Date: 10/07/14	Project No. 10627.003
amec		Figure 7

Note: Figure shall be produced in color to maintain information.



Explanation

Soil Samples Collected During Below Grade Demolition

- PCB concentrations not detected
- PCB concentrations detected less than 23 mg/kg
- Soil samples excavated
- Soil removal area
- Approximate location of buried structure or footing within structure member listed
- Below grade piping
- Phase boundary
- Chain link fence
- Railroad tracks (at grade, pre-demolition)
- Railroad tracks (buried, pre-demolition)
- Site boundary
- Pavement area
- Column and row numbering system
- Footing
- PCBs — Total polychlorinated biphenyls
- mg/kg — Milligrams per kilogram

Notes:

1. All locations are approximate.
2. Soil samples collected in the Phase III area are relative to elevation of 182 feet above MLS. Soil samples collected in the Phase IV area are relative to elevation of 183 feet above MLS. Soil samples collected in Phase VI are relative to elevations of survey dated January 11, 2010.

20 10 0 20
Approximate Scale in Feet

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002; Aluminum Company of America "Works General-MPA" figure dated October 10, 1984; Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958; surveys conducted May 31, 2006 and June 6, 2006 by CalVada Surveyors; and surveys conducted October 12, 2011, September 10, 2013, March 24, 2014, May 28, 2014, June 17, 2014, and July 24, 2014 by Dulin & Boynton.

SOIL REMOVAL AREAS AND SAMPLE LOCATIONS
FOR 5 TO 15 FEET
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: pah	Date: 10/07/14	Project No. 10627.003
amec		Figure 8

Note: Figure shall be produced in color to maintain information.

Path: Y:\10627.003.0\esri\PhaseIII-IV-VI_Data_figures_tb_001_Soil_5-15ft.mxd

Plot Date: 10/08/2014 2:00:14 PM, Plotted by: pat.herring
Drawing Path: Y:\10627.003.0\acad\Reports-2014\Phase III-IV-VI Data Report_Fig09_PhsIII-IV Below Grade Structure_locs.dwg , Phase III-IV

Explanation

- Below grade structure
- Historical below grade structure
- Site boundary
- Phasing area boundary
- Chain link fence
- Railroad tracks (at grade, pre-demolition)
- Railroad tracks (buried, pre-demolition)
- Concrete area
- Building pad and footings
- BLDG Building designation
- 69 G Column and row numbering system for footings

Basemap modified from Pechiney Cast Plate, Inc. Site Plan dated January 9, 2002; Geraghty & Miller, Inc. "Groundwater Elevation and Volatile Organic Compound Concentrations December 8, 1994" Figure dated February 2, 1995; Aluminum Company of America "Works General-MPA" Figure dated October 10, 1984; and Los Angeles County Assessor's Office Parcel Map 6310/Sheet 8 dated November 5, 1958.

BELOW GRADE STRUCTURE LOCATIONS - PRE-DEMOLITION AND ACTUAL
PHASE III, IV, AND VI AREAS
Former Pechiney Cast Plate, Inc. Facility
3200 Fruitland Avenue
Vernon, California

By: jrw	Date: 10/0714	Project No. 10627.003
amec		Figure 9

LEGEND

REMOVED PIPE/MANHOLE/FLOOR DRAIN/CAP

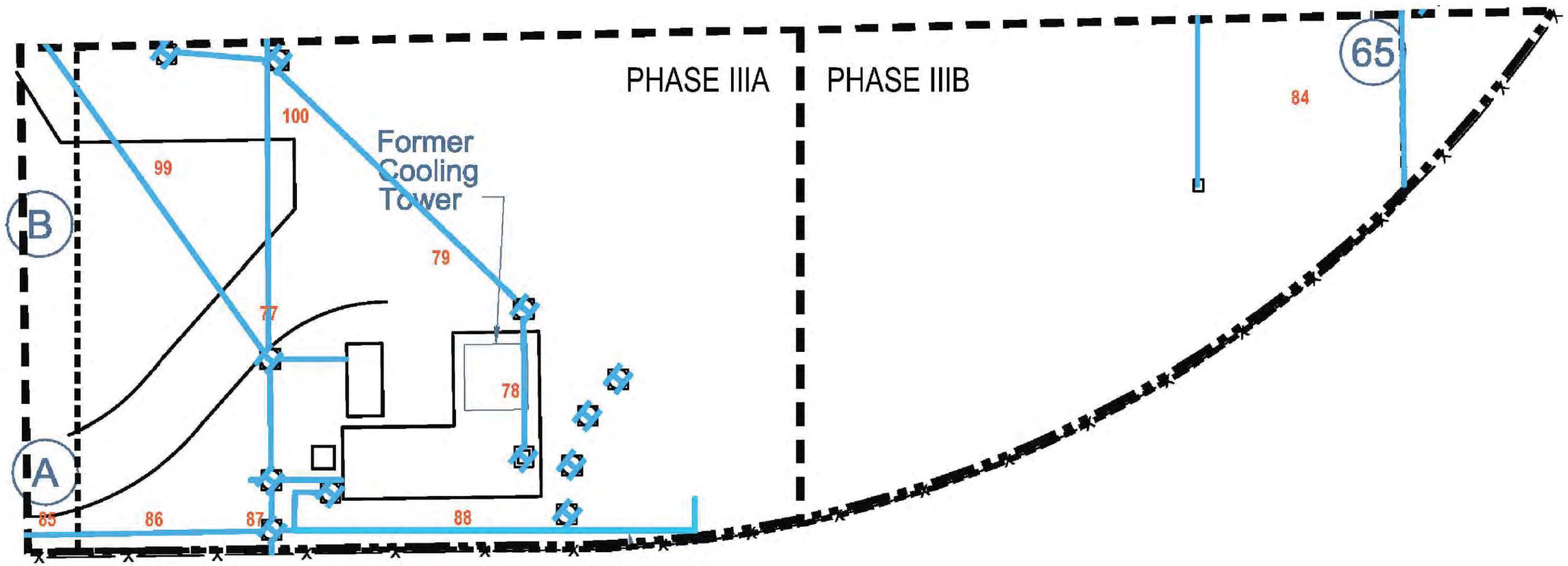


Figure 10A

PHASE III - PIPE REMOVALS
BELOW GRADE DEMOLITION & SOIL EXCAVATION
PECHINEY CAST PLATE, INC., FACILITY
3200 FRUITLAND AVENUE, VERNON, CALIFORNIA

N

DRAWN BY: CY
APPROVED BY: CP
DATE: 08/20/14

American Integrated Services, Inc.
P.O. BOX 92316, LONG BEACH, CA 90809-2316 (310) 522-1168 FAX (310) 522-0474

Plot Date: 10/07/2014 7:11:56 PM , Plotted by: pat.herring
Drawing Path: Y:\10627.003.0\acad\Reports-2014\Phase III-IV-VI Data Report_Fig10A_PhaseIII Pipe Removals.dwg

LEGEND

- REMOVED PIPE/MANHOLE/FLOOR DRAIN/CAP
- NOT ENCOUNTERED
- NEW PIPE ENCOUNTERED
- CONDUIT
- 827 APPROXIMATE LOCATION OF SWINDELL PIT (CAPPED & LEFT IN PLACE)

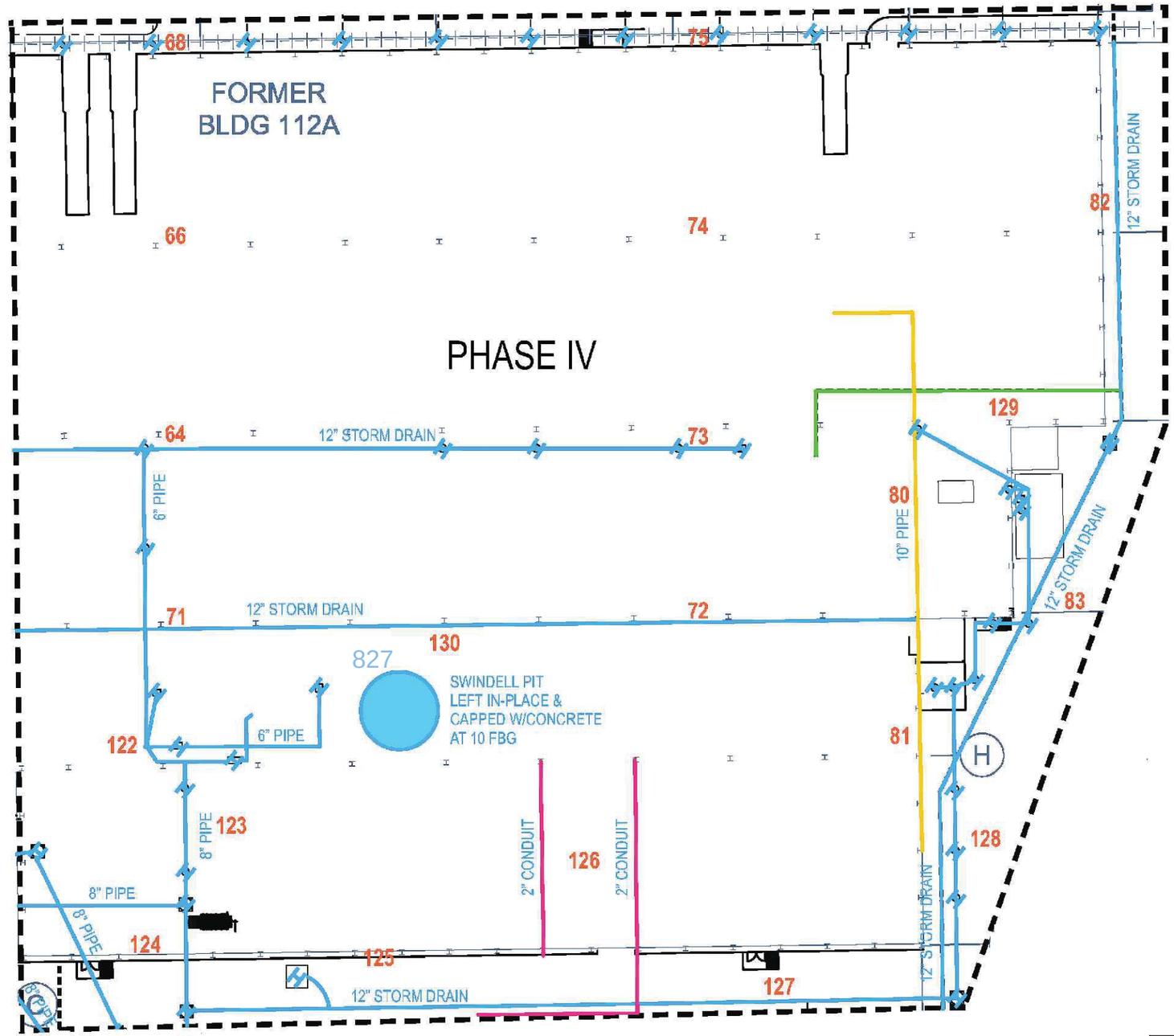


Figure 10B

PHASE IV - PIPE REMOVALS
BELOW GRADE DEMOLITION & SOIL EXCAVATION
PECHINEY CAST PLATE, INC., FACILITY
3200 FRUITLAND AVENUE, VERNON, CALIFORNIA

DRAWN BY: CY
APPROVED BY: CP
DATE: 08/20/14

American Integrated Services, Inc.
P.O. BOX 92316, LONG BEACH, CA 90809-2316 (310) 522-1168 FAX (310) 522-0474

Plot Date: 10/07/2014 7:12:41 PM , Plotted by: pat.herring
Drawing Path: Y:\10627.003.0\acad\Reports-2014\Phase III-IV-VI Data Report_Fig10B_PhaseIV Pipe Removals.dwg

APPENDIX A

Laboratory Reports and Chain-of-Custody Documentation – Soil, Concrete, and Other Media

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-10-2388

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 11/04/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 13-10-2388

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2 Sample Summary. 4

3 Detections Summary. 5

4 Client Sample Data. 6
4.1 EPA 8082 PCB Aroclors (Solid). 6

5 Quality Control Sample Data. 11
5.1 MS/MSD. 11
5.2 LCS/LCSD. 12

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7 Glossary of Terms and Qualifiers. 14

8 Chain of Custody/Sample Receipt Form. 15

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-10-2388 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 10/31/13. They were assigned to Work Order 13-10-2388.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-10-2388
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	10/31/13 16:53
		Number of Containers:	8
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-1	13-10-2388-1	10/31/13 14:50	1	Solid
W-2	13-10-2388-2	10/31/13 15:00	1	Solid
W-3	13-10-2388-3	10/31/13 15:05	1	Solid
W-4	13-10-2388-4	10/31/13 15:15	1	Solid
W-5	13-10-2388-5	10/31/13 15:20	1	Solid
W-6	13-10-2388-6	10/31/13 15:25	1	Solid
W-7	13-10-2388-7	10/31/13 15:28	1	Solid
W-8	13-10-2388-8	10/31/13 15:30	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-10-2388
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	10/31/13
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-1 (13-10-2388-1)						
Aroclor-1248	10000		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	4200		500	ug/kg	EPA 8082	EPA 3540C
W-2 (13-10-2388-2)						
Aroclor-1248	7600		1000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	3200		1000	ug/kg	EPA 8082	EPA 3540C
W-3 (13-10-2388-3)						
Aroclor-1248	3800		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2600		500	ug/kg	EPA 8082	EPA 3540C
W-4 (13-10-2388-4)						
Aroclor-1248	160		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	130		50	ug/kg	EPA 8082	EPA 3540C
W-5 (13-10-2388-5)						
Aroclor-1248	23000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1600		250	ug/kg	EPA 8082	EPA 3540C
W-6 (13-10-2388-6)						
Aroclor-1248	150		50	ug/kg	EPA 8082	EPA 3540C
W-7 (13-10-2388-7)						
Aroclor-1248	790000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	79000		50000	ug/kg	EPA 8082	EPA 3540C
W-8 (13-10-2388-8)						
Aroclor-1248	810000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	80000		50000	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-1	**13-10-2388-1-A**	**10/31/13 14:50**	**Solid**	**GC 31**	**10/31/13**	**11/02/13 12:52**	**131031L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1248	10000	500	10	
Aroclor-1254	ND	500	10	
Aroclor-1260	4200	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	71	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1000	20	
Aroclor-1221	ND	1000	20	
Aroclor-1232	ND	1000	20	
Aroclor-1242	ND	1000	20	
Aroclor-1248	7600	1000	20	
Aroclor-1254	ND	1000	20	
Aroclor-1260	3200	1000	20	
Aroclor-1262	ND	1000	20	
Aroclor-1268	ND	1000	20	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-3	**13-10-2388-3-A**	**10/31/13 15:05**	**Solid**	**GC 31**	**10/31/13**	**11/02/13 13:30**	**131031L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1248	3800	500	10	
Aroclor-1254	ND	500	10	
Aroclor-1260	2600	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	127	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	160	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	130	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-5	**13-10-2388-5-A**	**10/31/13 15:20**	**Solid**	**GC 31**	**10/31/13**	**11/02/13 14:08**	**131031L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	250	5	
Aroclor-1221	ND	250	5	
Aroclor-1232	ND	250	5	
Aroclor-1242	ND	250	5	
Aroclor-1254	ND	250	5	
Aroclor-1260	1600	250	5	
Aroclor-1262	ND	250	5	
Aroclor-1268	ND	250	5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	23000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-6	**13-10-2388-6-A**	**10/31/13 15:25**	**Solid**	**GC 31**	**10/31/13**	**11/02/13 14:27**	**131031L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	150	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1248	790000	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	79000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	430	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-8	**13-10-2388-8-A**	**10/31/13 15:30**	**Solid**	**GC 31**	**10/31/13**	**11/02/13 15:05**	**131031L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1248	810000	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	80000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-5	**Solid**	**GC 31**	**10/31/13**	**11/02/13 15:24**	**131031S17**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	4438	4438	3964	3964	50-135	11	0-25	3
Aroclor-1260	1614	100.0	1946	332	1801	187	50-135	8	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure	Date Received:	10/31/13
121 Innovation Drive, Suite 200	Work Order:	13-10-2388
Irvine, CA 92617-3094	Preparation:	EPA 3540C
	Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-02-003-112	**Solid**	**GC 31**	**11/02/13 02:36**	**131031L17**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	107.7	108	50-135	
Aroclor-1260	100.0	114.2	114	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-10-2388

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-10-2388

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 27301

PROJECT NAME:		DATE: 10/31/13	PAGE 1 OF 1
PROJECT NUMBER: 01062700030	LABORATORY NAME: CalScience	CLIENT INFORMATION:	REPORTING REQUIREMENTS: 13-10-2388
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48-HR			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES: EPA 8082 (PCBs)

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	10/31/13	1450	W-1	X	4 oz Jar	S		None	X		1	
2		1500	W-2	X		S			X		1	
3		1505	W-3	X		S			X		1	
4		1515	W-4	X		S			X		1	
5		1520	W-5	X		S			X		1	
6		1525	W-6	X		S			X		1	
7		1528	W-7	X		S			X		1	
8		1530	W-8	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	10/31/13	1550	SIGNATURE:	10/31/13	1550
PRINTED NAME: Stephen Wittenberg			PRINTED NAME: Arthur Young		
COMPANY: AMEC			COMPANY: CalScience		
SIGNATURE:	10/31/13	1653	SIGNATURE:	10/31/13	1653
PRINTED NAME: Arthur Young			PRINTED NAME: Noel Cruz		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS: Temperature Blank Submitted

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-10-2388

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 10/31/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.2 °C - 0.2 °C (CF) = 1.0 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 13-10-2388

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 11/05/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 13-10-2388

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-10-2388 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 10/31/13. They were assigned to Work Order 13-10-2388.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-10-2388
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	10/31/13 16:53
		Number of Containers:	8
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-1	13-10-2388-1	10/31/13 14:50	1	Solid
W-2	13-10-2388-2	10/31/13 15:00	1	Solid
W-3	13-10-2388-3	10/31/13 15:05	1	Solid
W-4	13-10-2388-4	10/31/13 15:15	1	Solid
W-5	13-10-2388-5	10/31/13 15:20	1	Solid
W-6	13-10-2388-6	10/31/13 15:25	1	Solid
W-7	13-10-2388-7	10/31/13 15:28	1	Solid
W-8	13-10-2388-8	10/31/13 15:30	1	Solid

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-1	**13-10-2388-1-A**	**10/31/13 14:50**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:21**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	47.8	0.750	1	
Barium	243	0.500	1	
Beryllium	0.457	0.250	1	
Cadmium	3.12	0.500	1	
Chromium	33.6	0.250	1	
Cobalt	10.8	0.250	1	
Copper	221	0.500	1	
Lead	248	0.500	1	
Molybdenum	3.37	0.250	1	
Nickel	31.7	0.250	1	
Selenium	ND	0.750	1	
Silver	0.472	0.250	1	
Thallium	ND	0.750	1	
Vanadium	23.5	0.250	1	
Zinc	929	1.00	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-2	**13-10-2388-2-A**	**10/31/13 15:00**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:22**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	40.6	0.750	1	
Barium	180	0.500	1	
Beryllium	0.402	0.250	1	
Cadmium	1.90	0.500	1	
Chromium	25.0	0.250	1	
Cobalt	11.4	0.250	1	
Copper	149	0.500	1	
Lead	135	0.500	1	
Molybdenum	1.46	0.250	1	
Nickel	26.2	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	24.2	0.250	1	
Zinc	675	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-3	**13-10-2388-3-A**	**10/31/13 15:05**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:23**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	51.1	0.750	1	
Barium	134	0.500	1	
Beryllium	0.462	0.250	1	
Cadmium	0.757	0.500	1	
Chromium	23.8	0.250	1	
Cobalt	12.2	0.250	1	
Copper	109	0.500	1	
Lead	67.5	0.500	1	
Molybdenum	0.513	0.250	1	
Nickel	16.3	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	31.9	0.250	1	
Zinc	508	1.00	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-4	**13-10-2388-4-A**	**10/31/13 15:15**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:24**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	12.3	0.750	1	
Barium	124	0.500	1	
Beryllium	0.320	0.250	1	
Cadmium	ND	0.500	1	
Chromium	14.6	0.250	1	
Cobalt	11.4	0.250	1	
Copper	20.7	0.500	1	
Lead	3.58	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	11.7	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	31.3	0.250	1	
Zinc	69.2	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-5	**13-10-2388-5-A**	**10/31/13 15:20**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:25**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	100	0.750	1	
Barium	115	0.500	1	
Beryllium	0.462	0.250	1	
Cadmium	1.36	0.500	1	
Chromium	15.6	0.250	1	
Cobalt	10.8	0.250	1	
Copper	51.7	0.500	1	
Lead	54.4	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	17.9	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	29.4	0.250	1	
Zinc	687	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-6	**13-10-2388-6-A**	**10/31/13 15:25**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:30**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	34.7	0.750	1	
Barium	106	0.500	1	
Beryllium	0.297	0.250	1	
Cadmium	ND	0.500	1	
Chromium	12.6	0.250	1	
Cobalt	10.0	0.250	1	
Copper	15.3	0.500	1	
Lead	1.51	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	14.4	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	27.6	0.250	1	
Zinc	218	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-7	**13-10-2388-7-A**	**10/31/13 15:28**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:31**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	262	0.750	1	
Barium	136	0.500	1	
Beryllium	0.496	0.250	1	
Cadmium	1.34	0.500	1	
Chromium	20.8	0.250	1	
Cobalt	11.1	0.250	1	
Copper	94.8	0.500	1	
Lead	70.2	0.500	1	
Molybdenum	0.727	0.250	1	
Nickel	18.3	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	30.1	0.250	1	
Zinc	590	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-8	**13-10-2388-8-A**	**10/31/13 15:30**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:32**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	180	0.750	1	
Barium	115	0.500	1	
Beryllium	0.559	0.250	1	
Cadmium	1.14	0.500	1	
Chromium	22.0	0.250	1	
Cobalt	8.96	0.250	1	
Copper	120	0.500	1	
Lead	58.2	0.500	1	
Molybdenum	0.938	0.250	1	
Nickel	15.6	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	25.1	0.250	1	
Zinc	580	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-17581**	**N/A**	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:15**	**131104L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	ND	0.750	1	
Barium	ND	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	ND	0.250	1	
Cobalt	ND	0.250	1	
Copper	ND	0.500	1	
Lead	ND	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	ND	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	ND	0.250	1	
Zinc	ND	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-1	**13-10-2388-1-A**	**10/31/13 14:50**	**Solid**	**Mercury**	**11/04/13**	**11/05/13 12:37**	**131104L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.156	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0839	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-04-007-9800**	**N/A**	**Solid**	**Mercury**	**11/04/13**	**11/04/13 17:02**	**131104L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-0128-1	**Solid**	**ICP 7300**	**11/04/13**	**11/05/13 12:19**	**131104S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	4.684	19	4.300	17	50-115	9	0-20	3
Arsenic	1.061	25.00	22.40	85	22.89	87	75-125	2	0-20	
Barium	132.4	25.00	175.5	4X	218.0	4X	75-125	4X	0-20	Q
Beryllium	0.4439	25.00	24.89	98	25.36	100	75-125	2	0-20	
Cadmium	ND	25.00	24.61	98	25.02	100	75-125	2	0-20	
Chromium	46.10	25.00	69.86	95	76.29	121	75-125	9	0-20	
Cobalt	22.78	25.00	50.71	112	56.63	135	75-125	11	0-20	3
Copper	19.17	25.00	48.61	118	50.96	127	75-125	5	0-20	3
Lead	5.537	25.00	31.23	103	33.71	113	75-125	8	0-20	
Molybdenum	ND	25.00	20.16	81	20.82	83	75-125	3	0-20	
Nickel	41.74	25.00	71.62	119	70.64	116	75-125	1	0-20	
Selenium	ND	25.00	21.37	85	22.35	89	75-125	4	0-20	
Silver	ND	12.50	11.75	94	11.87	95	75-125	1	0-20	
Thallium	ND	25.00	21.60	86	21.66	87	75-125	0	0-20	
Vanadium	56.63	25.00	77.78	85	84.81	113	75-125	9	0-20	
Zinc	26.26	25.00	51.45	101	53.50	109	75-125	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-0128-1	**Solid**	**Mercury**	**11/04/13**	**11/04/13 17:09**	**131104S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7277	87	0.7140	86	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	10/31/13
121 Innovation Drive, Suite 200		Work Order:	13-10-2388
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
097-01-002-17581	**Solid**	**ICP 7300**	**11/05/13 12:17**	**131104L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.87	99	80-120	73-127	
Arsenic	25.00	22.65	91	80-120	73-127	
Barium	25.00	23.48	94	80-120	73-127	
Beryllium	25.00	23.77	95	80-120	73-127	
Cadmium	25.00	25.37	101	80-120	73-127	
Chromium	25.00	25.35	101	80-120	73-127	
Cobalt	25.00	27.28	109	80-120	73-127	
Copper	25.00	27.59	110	80-120	73-127	
Lead	25.00	25.59	102	80-120	73-127	
Molybdenum	25.00	24.83	99	80-120	73-127	
Nickel	25.00	26.62	106	80-120	73-127	
Selenium	25.00	23.57	94	80-120	73-127	
Silver	12.50	11.61	93	80-120	73-127	
Thallium	25.00	24.64	99	80-120	73-127	
Vanadium	25.00	23.40	94	80-120	73-127	
Zinc	25.00	27.87	111	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure	Date Received:	10/31/13
121 Innovation Drive, Suite 200	Work Order:	13-10-2388
Irvine, CA 92617-3094	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-04-007-9800	**Solid**	**Mercury**	**11/04/13 17:04**	**131104L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7756	93	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 13-10-2388

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1

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Glossary of Terms and Qualifiers

Work Order: 13-10-2388

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Conlan, Linda [Linda.Conlan@amec.com]
Sent: Monday, November 04, 2013 5:16 PM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 13-10-2388

Rush 24?

Linda Conlan, PG
Principal Geologist
AMEC Environment & Infrastructure, Inc.

From: Stephen Nowak [mailto:snowak@calscience.com]
Sent: Monday, November 04, 2013 5:15 PM
To: Conlan, Linda
Cc: Holland, Kim
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 13-10-2388

Linda-
Rush 48hr TAT?

Stephen Nowak
Project Manager
(714) 895-5494

The difference is service

From: Conlan, Linda [mailto:Linda.Conlan@amec.com]
Sent: Monday, November 04, 2013 5:11 PM
To: Stephen Nowak
Cc: Holland, Kim
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 13-10-2388

Stephen,

Can you also add metals analyses (EPA 6010/7000) to these samples.

Thank you,
Linda Conlan, PG
Principal Geologist
AMEC Environment & Infrastructure, Inc.

From: Stephen Nowak [mailto:snowak@calscience.com]
Sent: Monday, November 04, 2013 5:05 PM
To: Conlan, Linda; Holland, Kim; Huang, Stephen
Cc: Lee, Zhur
Subject: Former Pechiney Cast Plate Facility / 0106270030 / CEL 13-10-2388

Report, EDD, and Invoice are attached.

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CHAIN-OF-CUSTODY RECORD

NB 27301

PROJECT NAME:		DATE: 10/31/13	PAGE 1 OF 1
PROJECT NUMBER: 01061270030	LABORATORY NAME: CalScience	CLIENT INFORMATION:	REPORTING REQUIREMENTS: 13-10-2388
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48-HR			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: STEVE Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES: EPA 8082 (PCBs)

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	10/31/13	1450	W-1	X	4 oz Jar	S		None	X		1	
2		1500	W-2	X		S			X		1	
3		1505	W-3	X		S			X		1	
4		1515	W-4	X		S			X		1	
5		1520	W-5	X		S			X		1	
6		1525	W-6	X		S			X		1	
7		1528	W-7	X		S			X		1	
8		1530	W-8	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	10/31/13	1550	SIGNATURE:	10/31/13	1550
PRINTED NAME: Stephen Hwang			PRINTED NAME: Arthur Young		
COMPANY: AMEC			COMPANY: CalScience		
SIGNATURE:	10/31/13	1653	SIGNATURE:	10/31/13	1653
PRINTED NAME: Arthur Young			PRINTED NAME: Neil Cruz		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS: Temperature Blank Submitted

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-10-2388

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 10/31/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.2 °C - 0.2 °C (CF) = 1.0 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-11-1188

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AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 106270030

Attention: Steven Huang
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 11/18/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 13-11-1188

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 11/14/13. They were assigned to Work Order 13-11-1188.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1188
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		PO Number:	
		Date/Time Received:	11/14/13 17:50
		Number of Containers:	18
Attn:	Steven Huang		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
DC-365A	13-11-1188-1	11/14/13 13:10	1	Other
DC-365B	13-11-1188-2	11/14/13 13:15	1	Other
DC-366A	13-11-1188-3	11/14/13 13:20	1	Other
DC-366B	13-11-1188-4	11/14/13 13:25	1	Other
DC-367A	13-11-1188-5	11/14/13 13:30	1	Other
DC-367B	13-11-1188-6	11/14/13 13:35	1	Other
DC-368	13-11-1188-7	11/14/13 13:40	1	Other
119-I-P/S-CS-044	13-11-1188-8	11/14/13 14:00	1	Other
227-IIA-O-SS-001	13-11-1188-9	11/14/13 14:30	1	Solid
227-IIA-O-CS-001	13-11-1188-10	11/14/13 14:35	1	Other
227-IIA-O-CS-002	13-11-1188-11	11/14/13 14:40	1	Other
224-I-O-O-001	13-11-1188-12	11/14/13 07:03	1	Other
224-I-O-SS-001	13-11-1188-13	11/14/13 07:04	1	Solid
225-I-F/F-O-001	13-11-1188-14	11/14/13 11:37	1	Other
226-I-F/F-O-001	13-11-1188-15	11/14/13 14:09	1	Other
103-I-P-SS-005	13-11-1188-16	11/14/13 14:15	1	Solid
103-I-P-SS-006	13-11-1188-17	11/14/13 14:21	1	Solid
103-I-P-SS-007	13-11-1188-18	11/14/13 14:30	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1188
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/14/13
Attn:	Steven Huang		Page 1 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
DC-365A (13-11-1188-1)						
Aroclor-1248	290		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	400		50	ug/kg	EPA 8082	EPA 3540C
DC-365B (13-11-1188-2)						
Aroclor-1248	180		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	81		50	ug/kg	EPA 8082	EPA 3540C
DC-367A (13-11-1188-5)						
Aroclor-1248	64		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	150		50	ug/kg	EPA 8082	EPA 3540C
DC-367B (13-11-1188-6)						
Aroclor-1248	220		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	63		50	ug/kg	EPA 8082	EPA 3540C
DC-368 (13-11-1188-7)						
Aroclor-1248	87		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	170		50	ug/kg	EPA 8082	EPA 3540C
119-I-P/S-CS-044 (13-11-1188-8)						
Aroclor-1248	74		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1188
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/14/13
Attn:	Steven Huang		Page 2 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
227-IIA-O-SS-001 (13-11-1188-9)						
Arsenic	2.89		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	95.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.347		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.04		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	13.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	2.64		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.26		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.3		1.00	mg/kg	EPA 6010B	EPA 3050B
C9-C10	930		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	410		50	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	62		50	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	120		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	250		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	820		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	2500		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	2100		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	1200		50	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	520		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	9100		50	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	69		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	85		50	ug/kg	EPA 8082	EPA 3540C
227-IIA-O-CS-001 (13-11-1188-10)						
C9-C10	150		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	96		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	95		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	290		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	820		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	770		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	450		50	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	130		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2800		50	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	64		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1188
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/14/13
Attn:	Steven Huang		Page 3 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
227-IIA-O-CS-002 (13-11-1188-11)						
C9-C10	65		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	39		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	6.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	7.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	31		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	85		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	220		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	200		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	110		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	44		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	840		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
224-I-O-O-001 (13-11-1188-12)						
Arsenic	16.0		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	107		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.327		0.250	mg/kg	EPA 6010B	EPA 3050B
Cadmium	3.08		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	36.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	162		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	620		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	5.53		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	34.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	26.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	402		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.151		0.0835	mg/kg	EPA 7471A	EPA 7471A Total
C25-C28	37		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	47		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	46		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	100		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	54		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	320		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	300		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	410		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	82		50	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1188
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/14/13
Attn:	Steven Huang		Page 4 of 5

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
225-I-F/F-O-001 (13-11-1188-14)						
Arsenic	43.2		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	119		0.500	mg/kg	EPA 6010B	EPA 3050B
Cadmium	4.39		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	70.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	13.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	190		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	19200		5.00	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	12.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	224		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	5.60		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	456		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.163		0.0835	mg/kg	EPA 7471A	EPA 7471A Total
C29-C32	500		500	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	600		500	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	1700		500	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	3200		500	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	700		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	1600		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1800		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	590		50	ug/kg	EPA 8082	EPA 3540C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1188
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/14/13
Attn:	Steven Huang		Page 5 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
226-I-F/F-O-001 (13-11-1188-15)						
Arsenic	5.54		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	98.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.323		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.99		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	24.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	2800		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.574		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	16.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	25.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	109		1.00	mg/kg	EPA 6010B	EPA 3050B
C29-C32	30		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	31		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	65		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	160		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	130		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	230		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	54		50	ug/kg	EPA 8082	EPA 3540C
103-I-P-SS-005 (13-11-1188-16)						
Aroclor-1248	66		50	ug/kg	EPA 8082	EPA 3540C
103-I-P-SS-007 (13-11-1188-18)						
Aroclor-1248	110		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	72		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
227-IIA-O-SS-001	**13-11-1188-9-A**	**11/14/13 14:30**	**Solid**	**GC 46**	**11/14/13**	**11/18/13 12:10**	**131114B11**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10	
C7	ND	50	10	
C8	ND	50	10	
C9-C10	930	50	10	
C11-C12	410	50	10	
C13-C14	ND	50	10	
C15-C16	ND	50	10	
C17-C18	ND	50	10	
C19-C20	62	50	10	
C21-C22	120	50	10	
C23-C24	250	50	10	
C25-C28	820	50	10	
C29-C32	2500	50	10	
C33-C36	2100	50	10	
C37-C40	1200	50	10	
C41-C44	520	50	10	
C6-C44 Total	9100	50	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	91	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
227-IIA-O-CS-001	**13-11-1188-10-A**	**11/14/13 14:35**	**Other**	**GC 46**	**11/14/13**	**11/18/13 12:59**	**131114B11**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10	
C7	ND	50	10	
C8	ND	50	10	
C9-C10	150	50	10	
C11-C12	96	50	10	
C13-C14	ND	50	10	
C15-C16	ND	50	10	
C17-C18	ND	50	10	
C19-C20	ND	50	10	
C21-C22	ND	50	10	
C23-C24	95	50	10	
C25-C28	290	50	10	
C29-C32	820	50	10	
C33-C36	770	50	10	
C37-C40	450	50	10	
C41-C44	130	50	10	
C6-C44 Total	2800	50	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
227-IIA-O-CS-002	**13-11-1188-11-A**	**11/14/13 14:40**	**Other**	**GC 46**	**11/14/13**	**11/18/13 11:54**	**131114B11**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	65	5.0	1	
C11-C12	39	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	6.7	5.0	1	
C19-C20	7.4	5.0	1	
C21-C22	12	5.0	1	
C23-C24	31	5.0	1	
C25-C28	85	5.0	1	
C29-C32	220	5.0	1	
C33-C36	200	5.0	1	
C37-C40	110	5.0	1	
C41-C44	44	5.0	1	
C6-C44 Total	840	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
224-I-O-O-001	**13-11-1188-12-A**	**11/14/13 07:03**	**Other**	**GC 46**	**11/14/13**	**11/15/13 16:06**	**131114B11**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5	
C7	ND	25	5	
C8	ND	25	5	
C9-C10	ND	25	5	
C11-C12	ND	25	5	
C13-C14	ND	25	5	
C15-C16	ND	25	5	
C17-C18	ND	25	5	
C19-C20	ND	25	5	
C21-C22	ND	25	5	
C23-C24	ND	25	5	
C25-C28	37	25	5	
C29-C32	47	25	5	
C33-C36	46	25	5	
C37-C40	100	25	5	
C41-C44	54	25	5	
C6-C44 Total	320	25	5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	130	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
225-I-F/F-O-001	**13-11-1188-14-A**	**11/14/13 11:37**	**Other**	**GC 46**	**11/14/13**	**11/15/13 16:23**	**131114B11**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	500	100	
C7	ND	500	100	
C8	ND	500	100	
C9-C10	ND	500	100	
C11-C12	ND	500	100	
C13-C14	ND	500	100	
C15-C16	ND	500	100	
C17-C18	ND	500	100	
C19-C20	ND	500	100	
C21-C22	ND	500	100	
C23-C24	ND	500	100	
C25-C28	ND	500	100	
C29-C32	500	500	100	
C33-C36	600	500	100	
C37-C40	1700	500	100	
C41-C44	ND	500	100	
C6-C44 Total	3200	500	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	135	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
226-I-F/F-O-001	**13-11-1188-15-A**	**11/14/13 14:09**	**Other**	**GC 46**	**11/14/13**	**11/15/13 16:39**	**131114B11**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5	
C7	ND	25	5	
C8	ND	25	5	
C9-C10	ND	25	5	
C11-C12	ND	25	5	
C13-C14	ND	25	5	
C15-C16	ND	25	5	
C17-C18	ND	25	5	
C19-C20	ND	25	5	
C21-C22	ND	25	5	
C23-C24	ND	25	5	
C25-C28	ND	25	5	
C29-C32	30	25	5	
C33-C36	31	25	5	
C37-C40	ND	25	5	
C41-C44	65	25	5	
C6-C44 Total	160	25	5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-633**	**N/A**	**Solid**	**GC 46**	**11/14/13**	**11/14/13 18:39**	**131114B11**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
227-IIA-O-SS-001	**13-11-1188-9-A**	**11/14/13 14:30**	**Solid**	**ICP 7300**	**11/15/13**	**11/15/13 11:58**	**131115L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	2.89	0.750	1	
Barium	95.6	0.500	1	
Beryllium	0.347	0.250	1	
Cadmium	ND	0.500	1	
Chromium	12.4	0.250	1	
Cobalt	9.04	0.250	1	
Copper	13.3	0.500	1	
Lead	2.64	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	9.26	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	29.3	0.250	1	
Zinc	48.3	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
224-I-O-O-001	**13-11-1188-12-A**	**11/14/13 07:03**	**Other**	**ICP 7300**	**11/15/13**	**11/15/13 11:59**	**131115L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	16.0	0.750	1	
Barium	107	0.500	1	
Beryllium	0.327	0.250	1	
Cadmium	3.08	0.500	1	
Chromium	36.3	0.250	1	
Cobalt	10.1	0.250	1	
Copper	162	0.500	1	
Lead	620	0.500	1	
Molybdenum	5.53	0.250	1	
Nickel	34.7	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	26.8	0.250	1	
Zinc	402	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
225-I-F/F-O-001	**13-11-1188-14-A**	**11/14/13 11:37**	**Other**	**ICP 7300**	**11/15/13**	**11/15/13 12:01**	**131115L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	43.2	0.750	1	
Barium	119	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	4.39	0.500	1	
Chromium	70.6	0.250	1	
Cobalt	13.8	0.250	1	
Copper	190	0.500	1	
Molybdenum	12.5	0.250	1	
Nickel	224	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	5.60	0.250	1	
Zinc	456	1.00	1	

Parameter	Result	RL	DF	Qualifiers
Lead	19200	5.00	10	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
226-I-F/F-O-001	**13-11-1188-15-A**	**11/14/13 14:09**	**Other**	**ICP 7300**	**11/15/13**	**11/15/13 12:02**	**131115L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	5.54	0.750	1	
Barium	98.7	0.500	1	
Beryllium	0.323	0.250	1	
Cadmium	ND	0.500	1	
Chromium	14.1	0.250	1	
Cobalt	8.99	0.250	1	
Copper	24.8	0.500	1	
Lead	2800	0.500	1	
Molybdenum	0.574	0.250	1	
Nickel	16.0	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	25.9	0.250	1	
Zinc	109	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-17639**	**N/A**	**Solid**	**ICP 7300**	**11/15/13**	**11/15/13 11:43**	**131115L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	ND	0.750	1	
Barium	ND	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	ND	0.250	1	
Cobalt	ND	0.250	1	
Copper	ND	0.500	1	
Lead	ND	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	ND	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	ND	0.250	1	
Zinc	ND	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
227-IIA-O-SS-001	**13-11-1188-9-A**	**11/14/13 14:30**	**Solid**	**Mercury**	**11/15/13**	**11/15/13 11:32**	**131115L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	0.151	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	0.163	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-365A	**13-11-1188-1-A**	**11/14/13 13:10**	**Other**	**GC 31**	**11/14/13**	**11/18/13 00:04**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	290	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	400	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	303	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	74	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	180	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	81	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	395	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	69	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-366A	**13-11-1188-3-A**	**11/14/13 13:20**	**Other**	**GC 31**	**11/14/13**	**11/18/13 00:42**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-367A	**13-11-1188-5-A**	**11/14/13 13:30**	**Other**	**GC 31**	**11/14/13**	**11/18/13 01:01**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	64	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	150	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	70	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	220	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	63	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-368	**13-11-1188-7-A**	**11/14/13 13:40**	**Other**	**GC 31**	**11/14/13**	**11/18/13 01:39**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	87	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	170	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	69	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	74	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
227-IIA-O-SS-001	**13-11-1188-9-A**	**11/14/13 14:30**	**Solid**	**GC 31**	**11/14/13**	**11/18/13 01:58**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	69	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	85	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	62	60-125	
2,4,5,6-Tetrachloro-m-Xylene	73	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	64	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	60-125	
2,4,5,6-Tetrachloro-m-Xylene	72	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
227-IIA-O-CS-002	**13-11-1188-11-A**	**11/14/13 14:40**	**Other**	**GC 31**	**11/14/13**	**11/18/13 02:36**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	78	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	300	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	410	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	82	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	239	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	71	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
224-I-O-SS-001	**13-11-1188-13-A**	**11/14/13 07:04**	**Solid**	**GC 31**	**11/14/13**	**11/18/13 03:14**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	142	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	77	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	700	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	590	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	163	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	73	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
225-I-F/F-O-001	**13-11-1188-14-A**	**11/14/13 11:37**	**Other**	**GC 31**	**11/14/13**	**11/17/13 09:08**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1254	1600	500	10	
Aroclor-1260	1800	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	128	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	75	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	130	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	230	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	54	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	183	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	75	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
103-I-P-SS-005	**13-11-1188-16-A**	**11/14/13 14:15**	**Solid**	**GC 31**	**11/14/13**	**11/18/13 04:30**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	66	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	147	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	74	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
103-I-P-SS-007	**13-11-1188-18-A**	**11/14/13 14:30**	**Solid**	**GC 31**	**11/14/13**	**11/18/13 05:08**	**131114L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	110	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	72	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	147	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
227-IIA-O-SS-001	**13-11-1188-9-A**	**11/14/13 14:30**	**Solid**	**GC/MS Q**	**11/14/13**	**11/14/13 19:58**	**131114L03**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	100	
Benzene	ND	500	100	
Bromobenzene	ND	500	100	
Bromochloromethane	ND	500	100	
Bromodichloromethane	ND	500	100	
Bromoform	ND	500	100	
Bromomethane	ND	2500	100	
2-Butanone	ND	5000	100	
n-Butylbenzene	ND	500	100	
sec-Butylbenzene	ND	500	100	
tert-Butylbenzene	ND	500	100	
Carbon Disulfide	ND	5000	100	
Carbon Tetrachloride	ND	500	100	
Chlorobenzene	ND	500	100	
Chloroethane	ND	500	100	
Chloroform	ND	500	100	
Chloromethane	ND	2500	100	
2-Chlorotoluene	ND	500	100	
4-Chlorotoluene	ND	500	100	
Dibromochloromethane	ND	500	100	
1,2-Dibromo-3-Chloropropane	ND	1000	100	
1,2-Dibromoethane	ND	500	100	
Dibromomethane	ND	500	100	
1,2-Dichlorobenzene	ND	500	100	
1,3-Dichlorobenzene	ND	500	100	
1,4-Dichlorobenzene	ND	500	100	
Dichlorodifluoromethane	ND	500	100	
1,1-Dichloroethane	ND	500	100	
1,2-Dichloroethane	ND	500	100	
1,1-Dichloroethene	ND	500	100	
c-1,2-Dichloroethene	ND	500	100	
t-1,2-Dichloroethene	ND	500	100	
1,2-Dichloropropane	ND	500	100	
1,3-Dichloropropane	ND	500	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	11/14/13
121 Innovation Drive, Suite 200	Work Order:	13-11-1188
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 106270030

Parameter	Result	RL	DF	Qualifiers
2,2-Dichloropropane	ND	500	100	
1,1-Dichloropropene	ND	500	100	
c-1,3-Dichloropropene	ND	500	100	
t-1,3-Dichloropropene	ND	500	100	
Ethylbenzene	ND	500	100	
2-Hexanone	ND	5000	100	
Isopropylbenzene	ND	500	100	
p-Isopropyltoluene	ND	500	100	
Methylene Chloride	ND	5000	100	
4-Methyl-2-Pentanone	ND	5000	100	
Naphthalene	ND	5000	100	
n-Propylbenzene	ND	500	100	
Styrene	ND	500	100	
1,1,1,2-Tetrachloroethane	ND	500	100	
1,1,2,2-Tetrachloroethane	ND	500	100	
Tetrachloroethene	ND	500	100	
Toluene	ND	500	100	
1,2,3-Trichlorobenzene	ND	1000	100	
1,2,4-Trichlorobenzene	ND	500	100	
1,1,1-Trichloroethane	ND	500	100	
1,1,2-Trichloroethane	ND	500	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	100	
Trichloroethene	ND	500	100	
1,2,3-Trichloropropane	ND	500	100	
1,2,4-Trimethylbenzene	ND	500	100	
Trichlorofluoromethane	ND	5000	100	
1,3,5-Trimethylbenzene	ND	500	100	
Vinyl Acetate	ND	5000	100	
Vinyl Chloride	ND	500	100	
p/m-Xylene	ND	500	100	
o-Xylene	ND	500	100	
Methyl-t-Butyl Ether (MTBE)	ND	500	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	111	60-132	
Dibromofluoromethane	93	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-7846**	**N/A**	**Solid**	**GC/MS Q**	**11/14/13**	**11/14/13 14:40**	**131114L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	100	
Benzene	ND	500	100	
Bromobenzene	ND	500	100	
Bromochloromethane	ND	500	100	
Bromodichloromethane	ND	500	100	
Bromoform	ND	500	100	
Bromomethane	ND	2500	100	
2-Butanone	ND	5000	100	
n-Butylbenzene	ND	500	100	
sec-Butylbenzene	ND	500	100	
tert-Butylbenzene	ND	500	100	
Carbon Disulfide	ND	5000	100	
Carbon Tetrachloride	ND	500	100	
Chlorobenzene	ND	500	100	
Chloroethane	ND	500	100	
Chloroform	ND	500	100	
Chloromethane	ND	2500	100	
2-Chlorotoluene	ND	500	100	
4-Chlorotoluene	ND	500	100	
Dibromochloromethane	ND	500	100	
1,2-Dibromo-3-Chloropropane	ND	1000	100	
1,2-Dibromoethane	ND	500	100	
Dibromomethane	ND	500	100	
1,2-Dichlorobenzene	ND	500	100	
1,3-Dichlorobenzene	ND	500	100	
1,4-Dichlorobenzene	ND	500	100	
Dichlorodifluoromethane	ND	500	100	
1,1-Dichloroethane	ND	500	100	
1,2-Dichloroethane	ND	500	100	
1,1-Dichloroethene	ND	500	100	
c-1,2-Dichloroethene	ND	500	100	
t-1,2-Dichloroethene	ND	500	100	
1,2-Dichloropropane	ND	500	100	
1,3-Dichloropropane	ND	500	100	
2,2-Dichloropropane	ND	500	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	11/14/13
121 Innovation Drive, Suite 200	Work Order:	13-11-1188
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	100	
c-1,3-Dichloropropene	ND	500	100	
t-1,3-Dichloropropene	ND	500	100	
Ethylbenzene	ND	500	100	
2-Hexanone	ND	5000	100	
Isopropylbenzene	ND	500	100	
p-Isopropyltoluene	ND	500	100	
Methylene Chloride	ND	5000	100	
4-Methyl-2-Pentanone	ND	5000	100	
Naphthalene	ND	5000	100	
n-Propylbenzene	ND	500	100	
Styrene	ND	500	100	
1,1,1,2-Tetrachloroethane	ND	500	100	
1,1,2,2-Tetrachloroethane	ND	500	100	
Tetrachloroethene	ND	500	100	
Toluene	ND	500	100	
1,2,3-Trichlorobenzene	ND	1000	100	
1,2,4-Trichlorobenzene	ND	500	100	
1,1,1-Trichloroethane	ND	500	100	
1,1,2-Trichloroethane	ND	500	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	100	
Trichloroethene	ND	500	100	
1,2,3-Trichloropropane	ND	500	100	
1,2,4-Trimethylbenzene	ND	500	100	
Trichlorofluoromethane	ND	5000	100	
1,3,5-Trimethylbenzene	ND	500	100	
Vinyl Acetate	ND	5000	100	
Vinyl Chloride	ND	500	100	
p/m-Xylene	ND	500	100	
o-Xylene	ND	500	100	
Methyl-t-Butyl Ether (MTBE)	ND	500	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	114	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-0982-24	**Solid**	**GC 46**	**11/14/13**	**11/14/13 19:11**	**131114S11**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	308.3	77	312.4	78	64-130	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1189-7	**Solid**	**ICP 7300**	**11/15/13**	**11/15/13 11:46**	**131115S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	0.6833	3	1.341	5	50-115	65	0-20	3,4
Arsenic	4.530	25.00	29.16	99	30.96	106	75-125	6	0-20	
Barium	129.1	25.00	147.5	4X	157.7	4X	75-125	4X	0-20	Q
Beryllium	0.4316	25.00	25.41	100	27.29	107	75-125	7	0-20	
Cadmium	ND	25.00	25.11	100	26.05	104	75-125	4	0-20	
Chromium	15.88	25.00	42.42	106	44.21	113	75-125	4	0-20	
Cobalt	10.91	25.00	37.07	105	38.65	111	75-125	4	0-20	
Copper	17.81	25.00	45.26	110	48.52	123	75-125	7	0-20	
Lead	8.819	25.00	36.60	111	34.51	103	75-125	6	0-20	
Molybdenum	ND	25.00	22.19	89	23.61	94	75-125	6	0-20	
Nickel	11.86	25.00	38.40	106	39.83	112	75-125	4	0-20	
Selenium	ND	25.00	20.23	81	21.17	85	75-125	5	0-20	
Silver	ND	12.50	13.17	105	13.96	112	75-125	6	0-20	
Thallium	ND	25.00	10.06	40	13.78	55	75-125	31	0-20	3,4
Vanadium	33.89	25.00	57.60	95	62.48	114	75-125	8	0-20	
Zinc	60.60	25.00	87.03	106	92.85	129	75-125	6	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1189-7	**Solid**	**Mercury**	**11/15/13**	**11/15/13 11:14**	**131115S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8372	100	0.8266	99	71-137	1	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
224-I-O-SS-001	**Solid**	**GC 31**	**11/14/13**	**11/18/13 05:27**	**131114S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	99.34	99	105.9	106	50-135	6	0-25	
Aroclor-1260	ND	100.0	102.4	102	94.60	95	50-135	8	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-0488-31	**Solid**	**GC/MS Q**	**11/13/13**	**11/14/13 17:46**	**131114S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	49.20	98	46.74	93	61-127	5	0-20	
Carbon Tetrachloride	ND	50.00	58.67	117	57.15	114	51-135	3	0-29	
Chlorobenzene	ND	50.00	45.91	92	43.64	87	57-123	5	0-20	
1,2-Dibromoethane	ND	50.00	51.78	104	50.74	101	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	45.03	90	43.92	88	35-131	2	0-25	
1,2-Dichloroethane	ND	50.00	64.04	128	62.56	125	80-120	2	0-20	3
1,1-Dichloroethene	ND	50.00	51.93	104	50.21	100	47-143	3	0-25	
Ethylbenzene	ND	50.00	49.45	99	47.64	95	57-129	4	0-22	
Toluene	ND	50.00	50.20	100	48.15	96	63-123	4	0-20	
Trichloroethene	ND	50.00	55.17	110	52.95	106	44-158	4	0-20	
Vinyl Chloride	ND	50.00	46.41	93	44.77	90	49-139	4	0-47	
p/m-Xylene	ND	100.0	93.58	94	89.31	89	70-130	5	0-30	
o-Xylene	ND	50.00	45.72	91	43.26	87	70-130	6	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	55.70	111	54.63	109	57-123	2	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure	Date Received:	11/14/13
121 Innovation Drive, Suite 200	Work Order:	13-11-1188
Irvine, CA 92617-3094	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030		Page 1 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-15-490-633	**Solid**	**GC 46**	**11/14/13 18:55**	**131114B11**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	320.4	80	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
097-01-002-17639	**Solid**	**ICP 7300**	**11/15/13 11:44**	**131115L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.68	107	80-120	73-127	
Arsenic	25.00	26.51	106	80-120	73-127	
Barium	25.00	26.28	105	80-120	73-127	
Beryllium	25.00	25.82	103	80-120	73-127	
Cadmium	25.00	27.21	109	80-120	73-127	
Chromium	25.00	28.47	114	80-120	73-127	
Cobalt	25.00	29.13	117	80-120	73-127	
Copper	25.00	25.96	104	80-120	73-127	
Lead	25.00	25.31	101	80-120	73-127	
Molybdenum	25.00	26.03	104	80-120	73-127	
Nickel	25.00	28.72	115	80-120	73-127	
Selenium	25.00	25.53	102	80-120	73-127	
Silver	12.50	13.52	108	80-120	73-127	
Thallium	25.00	27.49	110	80-120	73-127	
Vanadium	25.00	25.79	103	80-120	73-127	
Zinc	25.00	29.30	117	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-04-007-9826	**Solid**	**Mercury**	**11/15/13 10:58**	**131115L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8216	98	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-02-003-125	**Solid**	**GC 31**	**11/17/13 04:03**	**131114L16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	96.40	96	50-135	
Aroclor-1260	100.0	97.57	98	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 5

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-796-7846	**Solid**	**GC/MS Q**	**11/14/13 13:15**	**131114L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	48.13	96	78-120	71-127	
Carbon Tetrachloride	50.00	57.88	116	49-139	34-154	
Chlorobenzene	50.00	46.12	92	79-120	72-127	
1,2-Dibromoethane	50.00	50.10	100	80-120	73-127	
1,2-Dichlorobenzene	50.00	45.54	91	75-120	68-128	
1,2-Dichloroethane	50.00	62.86	126	80-120	73-127	ME
1,1-Dichloroethene	50.00	50.92	102	74-122	66-130	
Ethylbenzene	50.00	50.04	100	76-120	69-127	
Toluene	50.00	50.30	101	77-120	70-127	
Trichloroethene	50.00	53.05	106	80-120	73-127	
Vinyl Chloride	50.00	46.58	93	68-122	59-131	
p/m-Xylene	100.0	92.60	93	75-125	67-133	
o-Xylene	50.00	45.40	91	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	52.79	106	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-11-1188

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	823	GC/MS Q	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-11-1188

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25873

PROJECT NAME: PECHINEY

DATE: 11/14/13 PAGE 1 OF 2

PROJECT NUMBER: 106270030

LABORATORY NAME: CalScience

CLIENT INFORMATION: AMEC IRVINE

REPORTING REQUIREMENTS:

RESULTS TO: STEVEN HUANG

LABORATORY ADDRESS:

TURNAROUND TIME: 48 Hr

13-11-1188

SAMPLE SHIPMENT METHOD: COURIER

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	METALS	6010/7471	8260 VOCs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	11/14/13	1310	DC-365A	X					4oz JAR	O			X		1	
2		1315	DC-365B	X						O			X		1	
3		1320	DC-366A	X						O			X		1	
4		1325	DC-366B	X						O			X		1	
5		1330	DC-367A	X						O			X		1	
6		1335	DC-367B	X						O			X		1	
7		1340	DC-368	X						O			X		1	
8		1400	119-I-P/S-CS-044	X						O			X		1	
9		1430	227-IIA-0-SS-001	X	X	X	X	X		S			X		1	
10	11/14/13	1435	227-IIA-0-CS-001	X	X					O			X		1	
11		1440	227-IIA-0-CS-002	X	X				4oz JAR	O			X		1	
12		0703	224-I-0-0-001	X	X	X				O					1	
13		0704	224-I-0-SS-001	X						S					1	
14		11:37	225-I-F/F-0-001	X	X	X				O					1	
15		14:09	226-I-F/F-0-001	X	X	X				O					1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	11/14/13	16:40	SIGNATURE:	11/14/13	16:40
PRINTED NAME: Ken Curnutt			PRINTED NAME: DONNY KRAWAN		
COMPANY: AMEC			COMPANY: CEL		
SIGNATURE:	11/14/13	17:50	SIGNATURE:	11/14/13	17:0
PRINTED NAME: DONNY KRAWAN			PRINTED NAME: Yuan Liao		
COMPANY: CEL			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS: Sample Delivery Group #3

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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NB 27329

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney			DATE: / PAGE 2 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		1188
TURNAROUND TIME: 48 hr			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Ken Gurnett

ANALYSES: 8082 PCB

	DATE	TIME	SAMPLE NUMBER	8082 PCB	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	11/14/13	14:15	103-I-P-SS-005	X	4 oz glass jar	S			X		1	
17	↓	14:21	103-I-P-SS-006	X	↓	S			X		1	
18	↓	14:30	103-I-P-SS-007	X	↓	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: / PRINTED NAME: Ken Gurnett / COMPANY: AMEC	11/14/13	16:40	SIGNATURE: / PRINTED NAME: PENNY KRAWAN / COMPANY: CEL	11/14/13	16:40
SIGNATURE: / PRINTED NAME: PENNY KRAWAN / COMPANY: CEL	11/14/13	17:50	SIGNATURE: / PRINTED NAME: Yaulian / COMPANY: CEL	11/14/13	1750
SIGNATURE: / PRINTED NAME: / COMPANY:			SIGNATURE: / PRINTED NAME: / COMPANY:		

TOTAL NUMBER OF CONTAINERS: 3/18

SAMPLING COMMENTS: Sample Delivery Group #3

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1188

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 11/14/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.1 °C - 0.2 °C (CF) = 2.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** BOY

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** BOY

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** RCZ

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☐	☑	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** RCZ

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** SOZ

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** SOZ

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1188

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Sample(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☐ **Broken**
- ☐ **Sample container(s) not labeled**
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

(-5) collection time per label is 13:35

(-6) collection time per label is 13:30

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: DZ 11/14/13

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Stephen Nowak

From: Tatone, Francesco [francesco.tatone@amec.com]
Sent: Friday, November 15, 2013 10:41 AM
To: Huang, Stephen; Curnutt, Kevin
Cc: Stephen Nowak
Subject: RE: ***COC!!!***

Hi Stephen

The COC is correct; Sample DC-367A has a sample time of 1330, whereas Sample DC-367B has a sample time of 1335.

Sincerely,
Francesco

From: Huang, Stephen
Sent: Friday, November 15, 2013 10:34 AM
To: Curnutt, Kevin; Tatone, Francesco
Cc: Stephen Nowak
Subject: FW: ***COC!!!***

Kevin/Francesco,

Please let me know which is correct.

Thanks,
Stephen

From: Stephen Nowak [mailto:snowak@calscience.com]
Sent: Friday, November 15, 2013 8:49 AM
To: Huang, Stephen
Subject: FW: ***COC!!!***

Steve-

Please take a look at the COC and sample anomaly form.

Sample DC-367A has a sample time of 13:30 listed on the COC, but the sample label states 13:35.

Sample DC-367B has a sample time of 13:35 listed on the COC, but the sample label states 13:30.

Please let me know which is correct.

Thanks-

Stephen Nowak
Project Manager
(714) 895-5494

The difference is service

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 13-11-1188

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 106270030

Attention: Steven Huang
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 11/26/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 106270030
Work Order Number: 13-11-1188

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 11/14/13. They were assigned to Work Order 13-11-1188.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1188
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		PO Number:	
		Date/Time Received:	11/14/13 17:50
		Number of Containers:	18
Attn:	Steven Huang		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
224-I-O-O-001	13-11-1188-12	11/14/13 07:03	1	Other
225-I-F/F-O-001	13-11-1188-14	11/14/13 11:37	1	Other
226-I-F/F-O-001	13-11-1188-15	11/14/13 14:09	1	Other

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
224-I-O-O-001	**13-11-1188-12-A**	**11/14/13 07:03**	**Other**	**ICP 7300**	**11/21/13**	**11/25/13 19:46**	**131123LA2**

Parameter	Result	RL	DF	Qualifiers
Lead	25.2	0.100	1	

Parameter	Result	RL	DF	Qualifiers
Lead	257	0.100	1	

Parameter	Result	RL	DF	Qualifiers
Lead	51.9	0.100	1	

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
224-I-O-O-001	**13-11-1188-12-A**	**11/14/13 07:03**	**Other**	**ICP 7300**	**11/21/13**	**11/22/13 16:25**	**131122LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	0.512	0.100	1	

Parameter	Result	RL	DF	Qualifiers
Lead	3.17	0.100	1	

Parameter	Result	RL	DF	Qualifiers
Lead	0.468	0.100	1	

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-10-2327-17	**Solid**	**ICP 7300**	**11/21/13**	**11/25/13 13:55**	**131123SA2**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	0.5122	5.000	5.350	97	5.415	98	75-125	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
224-I-O-O-001	**Other**	**ICP 7300**	**11/21/13**	**11/22/13 16:27**	**131122SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	0.5118	5.000	5.717	104	5.356	97	84-120	7	0-7	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 2

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
097-05-006-7029	**Aqueous**	**ICP 7300**	**11/25/13 13:49**	**131123LA2**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Lead	5.000	5.119	102	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/14/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1188
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 2

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-021-1026	**Aqueous**	**ICP 7300**	**11/22/13 16:23**	**131122LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Lead	5.000	5.139	103	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-11-1188

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 1311	469	ICP 7300	1
EPA 6010B	T22.11.5. AII	469	ICP 7300	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-11-1188

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Thursday, November 21, 2013 7:12 AM
To: Stephen Nowak
Cc: Huang, Stephen; dherrera@americanintegrated.com; Conlan, Linda
Subject: Request for STLC and TCLP

Steve,
Please run STLC and TCLP for lead on the following samples that were collected on 11-14-13 and submitted on COC #NB25873:

224-I-O-O-001
225-I-F/F-O-001
226-I-F/F-O-001

Please provide the most expeditious turnaround time available for these types of analyses. Thanks,

Kim

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CHAIN-OF-CUSTODY RECORD

NB25873

PROJECT NAME: PECHINEY			DATE: 11/14/13 PAGE 1 OF 2
PROJECT NUMBER: 106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS:
RESULTS TO: STEVEN HUANG	LABORATORY ADDRESS:		13-11-1188
TURNAROUND TIME: 48 Hr			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	METALS	6010/7471	8260 VOCs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	11/14/13	1310	DC-365A	X					4oz JAR	O			X		1	
2		1315	DC-365B	X						O			X		1	
3		1320	DC-366A	X						O			X		1	
4		1325	DC-366B	X						O			X		1	
5		1330	DC-367A	X						O			X		1	
6		1335	DC-367B	X						O			X		1	
7		1340	DC-368	X						O			X		1	
8		1400	119-I-P/S-CS-044	X						O			X		1	
9		1430	227-IIA-0-SS-001	X	X	X	X	X		S			X		1	
10	11/14/13	1435	227-IIA-0-CS-001	X	X					O			X		1	
11		1440	227-IIA-0-CS-002	X	X				4oz JAR	O			X		1	
12		0703	224-I-0-0-001	X	X	X				O					1	
13		0704	224-I-0-SS-001	X						S					1	
14		11:37	225-I-F/F-0-001	X	X	X				O					1	
15		14:09	226-I-F/F-0-001	X	X	X				O					1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Ken Curnutt COMPANY: Amec	11/14/13	16:40	SIGNATURE: [signature] PRINTED NAME: DONNY KRAWAN COMPANY: CEL	11/14/13	16:40
SIGNATURE: [signature] PRINTED NAME: DONNY KRAWAN COMPANY: CEL	11/14/13	17:50	SIGNATURE: [signature] PRINTED NAME: Yuan Liao COMPANY: CEL	11/14/13	17:0
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS: Sample Delivery Group #3

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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NB 27329

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney			DATE: / PAGE 2 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		1188
TURNAROUND TIME: 48 hr			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Ken Gurnett

ANALYSES: 8082 PCB

	DATE	TIME	SAMPLE NUMBER	8082 PCB	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	11/14/13	14:15	103-I-P-SS-005	X	4 oz glass jar	S			X		1	
17	↓	14:21	103-I-P-SS-006	X	↓	S			X		1	
18	↓	14:30	103-I-P-SS-007	X	↓	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: / PRINTED NAME: Ken Gurnett / COMPANY: AMEC	11/14/13	16:40	SIGNATURE: / PRINTED NAME: PENNY KRAWAN / COMPANY: CEL	11/14/13	16:40
SIGNATURE: / PRINTED NAME: PENNY KRAWAN / COMPANY: CEL	11/14/13	17:50	SIGNATURE: / PRINTED NAME: Yamilian / COMPANY: CEL	11/14/13	1750
SIGNATURE: / PRINTED NAME: / COMPANY:			SIGNATURE: / PRINTED NAME: / COMPANY:		

TOTAL NUMBER OF CONTAINERS: 3/18

SAMPLING COMMENTS:

Sample Delivery Group #3

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1188

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 11/14/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.1 °C - 0.2 °C (CF) = 2.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** BOY

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** BOY

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** RCZ

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☐	☑	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** RCZ

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** BOY

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** BOY

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1188

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Sample(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☐ **Broken**
- ☐ **Sample container(s) not labeled**
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

(-5) collection time per label is 13:35

(-6) collection time per label is 13:30

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: DZ 11/14/13

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Stephen Nowak

From: Tatone, Francesco [francesco.tatone@amec.com]
Sent: Friday, November 15, 2013 10:41 AM
To: Huang, Stephen; Curnutt, Kevin
Cc: Stephen Nowak
Subject: RE: ***COC!!!***

Hi Stephen

The COC is correct; Sample DC-367A has a sample time of 1330, whereas Sample DC-367B has a sample time of 1335.

Sincerely,
Francesco

From: Huang, Stephen
Sent: Friday, November 15, 2013 10:34 AM
To: Curnutt, Kevin; Tatone, Francesco
Cc: Stephen Nowak
Subject: FW: ***COC!!!***

Kevin/Francesco,

Please let me know which is correct.

Thanks,
Stephen

From: Stephen Nowak [mailto:snowak@calscience.com]
Sent: Friday, November 15, 2013 8:49 AM
To: Huang, Stephen
Subject: FW: ***COC!!!***

Steve-

Please take a look at the COC and sample anomaly form.

Sample DC-367A has a sample time of 13:30 listed on the COC, but the sample label states 13:35.

Sample DC-367B has a sample time of 13:35 listed on the COC, but the sample label states 13:30.

Please let me know which is correct.

Thanks-

Stephen Nowak
Project Manager
(714) 895-5494

The difference is service

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-11-1757

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 11/26/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 13-11-1757

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 11/21/13. They were assigned to Work Order 13-11-1757.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1757
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		PO Number:	
		Date/Time Received:	11/21/13 17:30
		Number of Containers:	30
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
CT-1	13-11-1757-1	11/20/13 14:40	7	Aqueous
CT-2	13-11-1757-2	11/20/13 14:50	7	Aqueous
250-I-P/S-SS-001	13-11-1757-3	11/21/13 08:00	1	Solid
250-I-P/S-SS-002	13-11-1757-4	11/21/13 08:05	1	Solid
250-I-P/S-CS-001	13-11-1757-5	11/21/13 08:10	1	Other
32-I-P/S-SS-001	13-11-1757-6	11/21/13 10:45	1	Solid
32-I-P/S-SS-002	13-11-1757-7	11/21/13 10:48	1	Solid
32-I-P/S-SS-003	13-11-1757-8	11/21/13 10:46	1	Solid
32-I-P/S-SS-004	13-11-1757-9	11/21/13 10:55	1	Solid
32-I-P/S-SS-005	13-11-1757-10	11/21/13 10:57	1	Solid
32-I-P/S-SS-006	13-11-1757-11	11/21/13 10:58	1	Solid
32-I-P/S-SS-007	13-11-1757-12	11/21/13 10:59	1	Solid
32-I-P/S-SS-008	13-11-1757-13	11/21/13 11:00	1	Solid
32-I-P/S-SS-009	13-11-1757-14	11/21/13 11:01	1	Solid
32-I-P/S-SS-010	13-11-1757-15	11/21/13 11:02	1	Solid
59-I-P/S-CS-010	13-11-1757-16	11/21/13 12:45	1	Other
59-I-P/S-CS-011	13-11-1757-17	11/21/13 12:47	1	Other
59-I-P/S-CS-012	13-11-1757-18	11/21/13 12:55	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1757
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/21/13
Attn:	Linda Conlan		Page 1 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
CT-1 (13-11-1757-1)						
Barium	0.0933		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Copper	0.0193		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Molybdenum	0.0451		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Zinc	0.0800		0.0100	mg/L	EPA 6010B	EPA 3010A Total
C6-C44 Total	120		100	ug/L	EPA 8015B (M)	EPA 3510C
Aroclor-1248	7.8		1.0	ug/L	EPA 8082	EPA 3510C
Aroclor-1260	1.1		1.0	ug/L	EPA 8082	EPA 3510C
CT-2 (13-11-1757-2)						
Barium	0.0853		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Molybdenum	0.0290		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Zinc	0.0243		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Aroclor-1248	4.8		1.0	ug/L	EPA 8082	EPA 3510C
250-I-P/S-SS-001 (13-11-1757-3)						
Arsenic	2.26		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	48.0		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	5.12		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	10.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	2.82		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	6.86		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	15.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	33.8		1.00	mg/kg	EPA 6010B	EPA 3050B
C29-C32	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	7.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	35		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	220		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1757
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/21/13
Attn:	Linda Conlan		Page 2 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
250-I-P/S-SS-002 (13-11-1757-4)						
Barium	99.0		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.288		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.54		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	18.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	7.81		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.65		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	26.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	53.6		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.110		0.0835	mg/kg	EPA 7471A	EPA 7471A Total
C13-C14	47		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	48		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	190		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	280		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	230		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	240		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	290		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	450		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	210		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	110		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2100		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	9200		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2100		500	ug/kg	EPA 8082	EPA 3540C
n-Butylbenzene	6.8		5.0	ug/kg	EPA 8260B	EPA 5030C
Ethylbenzene	38		5.0	ug/kg	EPA 8260B	EPA 5030C
Isopropylbenzene	5.4		5.0	ug/kg	EPA 8260B	EPA 5030C
p-Isopropyltoluene	12		5.0	ug/kg	EPA 8260B	EPA 5030C
Toluene	8.2		5.0	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	36		5.0	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	14		5.0	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	280		5.0	ug/kg	EPA 8260B	EPA 5030C
o-Xylene	190		5.0	ug/kg	EPA 8260B	EPA 5030C
250-I-P/S-CS-001 (13-11-1757-5)						
Aroclor-1248	8400		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2400		250	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1757
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/21/13
Attn:	Linda Conlan		Page 3 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
32-I-P/S-SS-001 (13-11-1757-6)						
Barium	52.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	5.08		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	4.81		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	4.99		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	0.745		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	3.94		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	14.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	23.5		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.297		0.0835	mg/kg	EPA 7471A	EPA 7471A Total
Aroclor-1248	52		50	ug/kg	EPA 8082	EPA 3540C
32-I-P/S-SS-002 (13-11-1757-7)						
Barium	66.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	8.28		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.84		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	7.60		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	0.777		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	6.27		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	20.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	33.1		1.00	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	510		50	ug/kg	EPA 8082	EPA 3540C
32-I-P/S-SS-003 (13-11-1757-8)						
Barium	36.1		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	3.97		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	3.59		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	3.63		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	0.842		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	3.17		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	11.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	17.4		1.00	mg/kg	EPA 6010B	EPA 3050B
32-I-P/S-SS-004 (13-11-1757-9)						
Aroclor-1248	500		50	ug/kg	EPA 8082	EPA 3540C
32-I-P/S-SS-005 (13-11-1757-10)						
Aroclor-1248	6200		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	240		50	ug/kg	EPA 8082	EPA 3540C
32-I-P/S-SS-006 (13-11-1757-11)						
Aroclor-1248	280		50	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-11-1757
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	11/21/13
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
32-I-P/S-SS-007 (13-11-1757-12)						
C15-C16	8.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	98		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	570		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	460		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	54		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	150		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	53		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	36		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	28		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1500		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	3500000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	71000		5000	ug/kg	EPA 8082	EPA 3540C
32-I-P/S-SS-008 (13-11-1757-13)						
C25-C28	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	29		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	440		50	ug/kg	EPA 8082	EPA 3540C
59-I-P/S-CS-010 (13-11-1757-16)						
Aroclor-1248	1500		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	1600		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	890		500	ug/kg	EPA 8082	EPA 3540C
59-I-P/S-CS-011 (13-11-1757-17)						
Aroclor-1248	9000		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	10000		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	4100		500	ug/kg	EPA 8082	EPA 3540C
59-I-P/S-CS-012 (13-11-1757-18)						
Aroclor-1248	110		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	210		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	110		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-001	**13-11-1757-3-A**	**11/21/13 08:00**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 13:56**	**131122B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	10	5.0	1	
C33-C36	7.2	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	35	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-002	**13-11-1757-4-A**	**11/21/13 08:05**	**Solid**	**GC 45**	**11/22/13**	**11/23/13 06:03**	**131122B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5	
C7	ND	25	5	
C8	ND	25	5	
C9-C10	ND	25	5	
C11-C12	ND	25	5	
C13-C14	47	25	5	
C15-C16	48	25	5	
C17-C18	190	25	5	
C19-C20	280	25	5	
C21-C22	230	25	5	
C23-C24	240	25	5	
C25-C28	290	25	5	
C29-C32	450	25	5	
C33-C36	210	25	5	
C37-C40	110	25	5	
C41-C44	ND	25	5	
C6-C44 Total	2100	25	5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	118	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-001	**13-11-1757-6-A**	**11/21/13 10:45**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 14:32**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-002	**13-11-1757-7-A**	**11/21/13 10:48**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 14:51**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-003	**13-11-1757-8-A**	**11/21/13 10:46**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 15:09**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-004	**13-11-1757-9-A**	**11/21/13 10:55**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 15:28**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-005	**13-11-1757-10-A**	**11/21/13 10:57**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 15:46**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-006	**13-11-1757-11-A**	**11/21/13 10:58**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 16:03**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	77	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-007	**13-11-1757-12-A**	**11/21/13 10:59**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 16:38**	**131122B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	8.7	5.0	1	
C17-C18	98	5.0	1	
C19-C20	570	5.0	1	
C21-C22	460	5.0	1	
C23-C24	54	5.0	1	
C25-C28	150	5.0	1	
C29-C32	53	5.0	1	
C33-C36	36	5.0	1	
C37-C40	28	5.0	1	
C41-C44	13	5.0	1	
C6-C44 Total	1500	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	115	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-008	**13-11-1757-13-A**	**11/21/13 11:00**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 16:56**	**131122B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	13	5.0	1	
C29-C32	11	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	29	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 11 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-009	**13-11-1757-14-A**	**11/21/13 11:01**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 17:15**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	94	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 12 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-010	**13-11-1757-15-A**	**11/21/13 11:02**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 17:33**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 13 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-646**	**N/A**	**Solid**	**GC 45**	**11/22/13**	**11/22/13 12:05**	**131122B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CT-1	**13-11-1757-1-DE**	**11/20/13 14:40**	**Aqueous**	**GC 45**	**11/22/13**	**11/22/13 20:54**	**131122B09**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1	
C7	ND	100	1	
C8	ND	100	1	
C9-C10	ND	100	1	
C11-C12	ND	100	1	
C13-C14	ND	100	1	
C15-C16	ND	100	1	
C17-C18	ND	100	1	
C19-C20	ND	100	1	
C21-C22	ND	100	1	
C23-C24	ND	100	1	
C25-C28	ND	100	1	
C29-C32	ND	100	1	
C33-C36	ND	100	1	
C37-C40	ND	100	1	
C41-C44	ND	100	1	
C6-C44 Total	120	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	120	68-140	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CT-2	**13-11-1757-2-DE**	**11/20/13 14:50**	**Aqueous**	**GC 45**	**11/22/13**	**11/22/13 21:13**	**131122B09**

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1	
C7	ND	100	1	
C8	ND	100	1	
C9-C10	ND	100	1	
C11-C12	ND	100	1	
C13-C14	ND	100	1	
C15-C16	ND	100	1	
C17-C18	ND	100	1	
C19-C20	ND	100	1	
C21-C22	ND	100	1	
C23-C24	ND	100	1	
C25-C28	ND	100	1	
C29-C32	ND	100	1	
C33-C36	ND	100	1	
C37-C40	ND	100	1	
C41-C44	ND	100	1	
C6-C44 Total	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	128	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-498-121**	**N/A**	**Aqueous**	**GC 45**	**11/22/13**	**11/22/13 20:00**	**131122B09**

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1	
C7	ND	100	1	
C8	ND	100	1	
C9-C10	ND	100	1	
C11-C12	ND	100	1	
C13-C14	ND	100	1	
C15-C16	ND	100	1	
C17-C18	ND	100	1	
C19-C20	ND	100	1	
C21-C22	ND	100	1	
C23-C24	ND	100	1	
C25-C28	ND	100	1	
C29-C32	ND	100	1	
C33-C36	ND	100	1	
C37-C40	ND	100	1	
C41-C44	ND	100	1	
C6-C44 Total	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	114	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-001	**13-11-1757-3-A**	**11/21/13 08:00**	**Solid**	**ICP 7300**	**11/22/13**	**11/25/13 13:24**	**131122L01A**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	2.26	0.750	1	
Barium	48.0	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	12.3	0.250	1	
Cobalt	5.12	0.250	1	
Copper	10.8	0.500	1	
Lead	2.82	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	6.86	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	15.4	0.250	1	
Zinc	33.8	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-002	**13-11-1757-4-A**	**11/21/13 08:05**	**Solid**	**ICP 7300**	**11/22/13**	**11/25/13 13:25**	**131122L01A**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	ND	0.750	1	
Barium	99.0	0.500	1	
Beryllium	0.288	0.250	1	
Cadmium	ND	0.500	1	
Chromium	12.8	0.250	1	
Cobalt	8.54	0.250	1	
Copper	18.7	0.500	1	
Lead	7.81	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	9.65	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	26.9	0.250	1	
Zinc	53.6	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-001	**13-11-1757-6-A**	**11/21/13 10:45**	**Solid**	**ICP 7300**	**11/22/13**	**11/25/13 13:26**	**131122L01A**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	ND	0.750	1	
Barium	52.4	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	5.08	0.250	1	
Cobalt	4.81	0.250	1	
Copper	4.99	0.500	1	
Lead	0.745	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	3.94	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	14.5	0.250	1	
Zinc	23.5	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-002	**13-11-1757-7-A**	**11/21/13 10:48**	**Solid**	**ICP 7300**	**11/22/13**	**11/25/13 13:28**	**131122L01A**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	ND	0.750	1	
Barium	66.7	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	8.28	0.250	1	
Cobalt	6.84	0.250	1	
Copper	7.60	0.500	1	
Lead	0.777	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	6.27	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	20.8	0.250	1	
Zinc	33.1	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-003	**13-11-1757-8-A**	**11/21/13 10:46**	**Solid**	**ICP 7300**	**11/22/13**	**11/25/13 13:29**	**131122L01A**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	ND	0.750	1	
Barium	36.1	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	3.97	0.250	1	
Cobalt	3.59	0.250	1	
Copper	3.63	0.500	1	
Lead	0.842	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	3.17	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	11.1	0.250	1	
Zinc	17.4	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-17673**	**N/A**	**Solid**	**ICP 7300**	**11/22/13**	**11/25/13 15:58**	**131122L01A**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	ND	0.750	1	
Barium	ND	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	ND	0.250	1	
Cobalt	ND	0.250	1	
Copper	ND	0.500	1	
Lead	ND	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	ND	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	ND	0.250	1	
Zinc	ND	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CT-1	**13-11-1757-1-F**	**11/20/13 14:40**	**Aqueous**	**ICP 7300**	**11/21/13**	**11/23/13 12:48**	**131121LA3**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1	
Arsenic	ND	0.0100	1	
Barium	0.0933	0.0100	1	
Beryllium	ND	0.0100	1	
Cadmium	ND	0.0100	1	
Chromium	ND	0.0100	1	
Cobalt	ND	0.0100	1	
Copper	0.0193	0.0100	1	
Lead	ND	0.0100	1	
Molybdenum	0.0451	0.0100	1	
Nickel	ND	0.0100	1	
Selenium	ND	0.0150	1	
Silver	ND	0.00500	1	
Thallium	ND	0.0150	1	
Vanadium	ND	0.0100	1	
Zinc	0.0800	0.0100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CT-2	**13-11-1757-2-F**	**11/20/13 14:50**	**Aqueous**	**ICP 7300**	**11/21/13**	**11/23/13 12:50**	**131121LA3**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1	
Arsenic	ND	0.0100	1	
Barium	0.0853	0.0100	1	
Beryllium	ND	0.0100	1	
Cadmium	ND	0.0100	1	
Chromium	ND	0.0100	1	
Cobalt	ND	0.0100	1	
Copper	ND	0.0100	1	
Lead	ND	0.0100	1	
Molybdenum	0.0290	0.0100	1	
Nickel	ND	0.0100	1	
Selenium	ND	0.0150	1	
Silver	ND	0.00500	1	
Thallium	ND	0.0150	1	
Vanadium	ND	0.0100	1	
Zinc	0.0243	0.0100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-003-13820**	**N/A**	**Aqueous**	**ICP 7300**	**11/21/13**	**11/21/13 22:45**	**131121LA3**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1	
Arsenic	ND	0.0100	1	
Barium	ND	0.0100	1	
Beryllium	ND	0.0100	1	
Cadmium	ND	0.0100	1	
Chromium	ND	0.0100	1	
Cobalt	ND	0.0100	1	
Copper	ND	0.0100	1	
Lead	ND	0.0100	1	
Molybdenum	ND	0.0100	1	
Nickel	ND	0.0100	1	
Selenium	ND	0.0150	1	
Silver	ND	0.00500	1	
Thallium	ND	0.0150	1	
Vanadium	ND	0.0100	1	
Zinc	ND	0.0100	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CT-1	**13-11-1757-1-F**	**11/20/13 14:40**	**Aqueous**	**Mercury**	**11/21/13**	**11/22/13 13:29**	**131121L04A**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-001	**13-11-1757-3-A**	**11/21/13 08:00**	**Solid**	**Mercury**	**11/22/13**	**11/22/13 12:35**	**131122L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	0.110	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	0.297	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-001	**13-11-1757-3-A**	**11/21/13 08:00**	**Solid**	**GC 31**	**11/21/13**	**11/24/13 12:08**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	220	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1248	9200	500	10	
Aroclor-1254	ND	500	10	
Aroclor-1260	2100	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	154	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-CS-001	**13-11-1757-5-A**	**11/21/13 08:10**	**Other**	**GC 31**	**11/21/13**	**11/25/13 14:22**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	250	5	
Aroclor-1221	ND	250	5	
Aroclor-1232	ND	250	5	
Aroclor-1242	ND	250	5	
Aroclor-1254	ND	250	5	
Aroclor-1260	2400	250	5	
Aroclor-1262	ND	250	5	
Aroclor-1268	ND	250	5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	71	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	8400	2500	50	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-001	**13-11-1757-6-A**	**11/21/13 10:45**	**Solid**	**GC 31**	**11/21/13**	**11/24/13 12:28**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	52	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	510	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-003	**13-11-1757-8-A**	**11/21/13 10:46**	**Solid**	**GC 31**	**11/21/13**	**11/24/13 13:06**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	500	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-005	**13-11-1757-10-A**	**11/21/13 10:57**	**Solid**	**GC 31**	**11/21/13**	**11/24/13 13:44**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	240	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	6200	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-006	**13-11-1757-11-A**	**11/21/13 10:58**	**Solid**	**GC 31**	**11/21/13**	**11/24/13 14:03**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	280	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	71000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	147	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-007	**13-11-1757-12-A**	**11/21/13 10:59**	**Solid**	**GC 31**	**11/21/13**	**11/24/13 16:16**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3500000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	440	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-009	**13-11-1757-14-A**	**11/21/13 11:01**	**Solid**	**GC 31**	**11/21/13**	**11/24/13 14:41**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
59-I-P/S-CS-010	**13-11-1757-16-A**	**11/21/13 12:45**	**Other**	**GC 31**	**11/21/13**	**11/24/13 11:30**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1248	1500	500	10	
Aroclor-1254	1600	500	10	
Aroclor-1260	890	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	72	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1248	9000	500	10	
Aroclor-1254	10000	500	10	
Aroclor-1260	4100	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	63	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
59-I-P/S-CS-012	**13-11-1757-18-A**	**11/21/13 12:55**	**Other**	**GC 31**	**11/21/13**	**11/24/13 15:19**	**131121L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	110	50	1	
Aroclor-1254	210	50	1	
Aroclor-1260	110	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CT-1	**13-11-1757-1-G**	**11/20/13 14:40**	**Aqueous**	**GC 31**	**11/21/13**	**11/25/13 12:47**	**131121L23**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1.0	1	
Aroclor-1221	ND	1.0	1	
Aroclor-1232	ND	1.0	1	
Aroclor-1242	ND	1.0	1	
Aroclor-1248	7.8	1.0	1	
Aroclor-1254	ND	1.0	1	
Aroclor-1260	1.1	1.0	1	
Aroclor-1262	ND	1.0	1	
Aroclor-1268	ND	1.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	50-135	
2,4,5,6-Tetrachloro-m-Xylene	70	50-135	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1.0	1	
Aroclor-1221	ND	1.0	1	
Aroclor-1232	ND	1.0	1	
Aroclor-1242	ND	1.0	1	
Aroclor-1248	4.8	1.0	1	
Aroclor-1254	ND	1.0	1	
Aroclor-1260	ND	1.0	1	
Aroclor-1262	ND	1.0	1	
Aroclor-1268	ND	1.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	50-135	
2,4,5,6-Tetrachloro-m-Xylene	74	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-640-17**	**N/A**	**Aqueous**	**GC 31**	**11/21/13**	**11/25/13 11:50**	**131121L23**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1.0	1	
Aroclor-1221	ND	1.0	1	
Aroclor-1232	ND	1.0	1	
Aroclor-1242	ND	1.0	1	
Aroclor-1248	ND	1.0	1	
Aroclor-1254	ND	1.0	1	
Aroclor-1260	ND	1.0	1	
Aroclor-1262	ND	1.0	1	
Aroclor-1268	ND	1.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	50-135	
2,4,5,6-Tetrachloro-m-Xylene	68	50-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CT-1	**13-11-1757-1-A**	**11/20/13 14:40**	**Aqueous**	**GC/MS QQ**	**11/22/13**	**11/22/13 13:18**	**131122L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1	
Benzene	ND	0.50	1	
Bromobenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1	
Bromodichloromethane	ND	1.0	1	
Bromoform	ND	1.0	1	
Bromomethane	ND	10	1	
2-Butanone	ND	10	1	
n-Butylbenzene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1	
Carbon Disulfide	ND	10	1	
Carbon Tetrachloride	ND	0.50	1	
Chlorobenzene	ND	1.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	1.0	1	
Chloromethane	ND	10	1	
2-Chlorotoluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1	
1,2-Dibromoethane	ND	1.0	1	
Dibromomethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1	
Dichlorodifluoromethane	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1	
1,3-Dichloropropane	ND	1.0	1	
2,2-Dichloropropane	ND	1.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1	
c-1,3-Dichloropropene	ND	0.50	1	
t-1,3-Dichloropropene	ND	0.50	1	
Ethylbenzene	ND	1.0	1	
2-Hexanone	ND	10	1	
Isopropylbenzene	ND	1.0	1	
p-Isopropyltoluene	ND	1.0	1	
Methylene Chloride	ND	10	1	
4-Methyl-2-Pentanone	ND	10	1	
Naphthalene	ND	10	1	
n-Propylbenzene	ND	1.0	1	
Styrene	ND	1.0	1	
1,1,1,2-Tetrachloroethane	ND	1.0	1	
1,1,2,2-Tetrachloroethane	ND	1.0	1	
Tetrachloroethene	ND	1.0	1	
Toluene	ND	1.0	1	
1,2,3-Trichlorobenzene	ND	1.0	1	
1,2,4-Trichlorobenzene	ND	1.0	1	
1,1,1-Trichloroethane	ND	1.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
1,1,2-Trichloroethane	ND	1.0	1	
Trichloroethene	ND	1.0	1	
Trichlorofluoromethane	ND	10	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	1.0	1	
1,3,5-Trimethylbenzene	ND	1.0	1	
Vinyl Acetate	ND	10	1	
Vinyl Chloride	ND	0.50	1	
p/m-Xylene	ND	1.0	1	
o-Xylene	ND	1.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	80-120	
Dibromofluoromethane	110	80-126	
1,2-Dichloroethane-d4	117	80-134	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CT-2	**13-11-1757-2-A**	**11/20/13 14:50**	**Aqueous**	**GC/MS QQ**	**11/22/13**	**11/22/13 13:44**	**131122L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1	
Benzene	ND	0.50	1	
Bromobenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1	
Bromodichloromethane	ND	1.0	1	
Bromoform	ND	1.0	1	
Bromomethane	ND	10	1	
2-Butanone	ND	10	1	
n-Butylbenzene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1	
Carbon Disulfide	ND	10	1	
Carbon Tetrachloride	ND	0.50	1	
Chlorobenzene	ND	1.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	1.0	1	
Chloromethane	ND	10	1	
2-Chlorotoluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1	
1,2-Dibromoethane	ND	1.0	1	
Dibromomethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1	
Dichlorodifluoromethane	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1	
1,3-Dichloropropane	ND	1.0	1	
2,2-Dichloropropane	ND	1.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1	
c-1,3-Dichloropropene	ND	0.50	1	
t-1,3-Dichloropropene	ND	0.50	1	
Ethylbenzene	ND	1.0	1	
2-Hexanone	ND	10	1	
Isopropylbenzene	ND	1.0	1	
p-Isopropyltoluene	ND	1.0	1	
Methylene Chloride	ND	10	1	
4-Methyl-2-Pentanone	ND	10	1	
Naphthalene	ND	10	1	
n-Propylbenzene	ND	1.0	1	
Styrene	ND	1.0	1	
1,1,1,2-Tetrachloroethane	ND	1.0	1	
1,1,2,2-Tetrachloroethane	ND	1.0	1	
Tetrachloroethene	ND	1.0	1	
Toluene	ND	1.0	1	
1,2,3-Trichlorobenzene	ND	1.0	1	
1,2,4-Trichlorobenzene	ND	1.0	1	
1,1,1-Trichloroethane	ND	1.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
1,1,2-Trichloroethane	ND	1.0	1	
Trichloroethene	ND	1.0	1	
Trichlorofluoromethane	ND	10	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	1.0	1	
1,3,5-Trimethylbenzene	ND	1.0	1	
Vinyl Acetate	ND	10	1	
Vinyl Chloride	ND	0.50	1	
p/m-Xylene	ND	1.0	1	
o-Xylene	ND	1.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	111	80-126	
1,2-Dichloroethane-d4	118	80-134	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-12560**	**N/A**	**Aqueous**	**GC/MS QQ**	**11/22/13**	**11/22/13 12:19**	**131122L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1	
Benzene	ND	0.50	1	
Bromobenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1	
Bromodichloromethane	ND	1.0	1	
Bromoform	ND	1.0	1	
Bromomethane	ND	10	1	
2-Butanone	ND	10	1	
n-Butylbenzene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1	
Carbon Disulfide	ND	10	1	
Carbon Tetrachloride	ND	0.50	1	
Chlorobenzene	ND	1.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	1.0	1	
Chloromethane	ND	10	1	
2-Chlorotoluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1	
1,2-Dibromoethane	ND	1.0	1	
Dibromomethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1	
Dichlorodifluoromethane	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1	
1,1-Dichloroethene	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1	
1,3-Dichloropropane	ND	1.0	1	
2,2-Dichloropropane	ND	1.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1	
c-1,3-Dichloropropene	ND	0.50	1	
t-1,3-Dichloropropene	ND	0.50	1	
Ethylbenzene	ND	1.0	1	
2-Hexanone	ND	10	1	
Isopropylbenzene	ND	1.0	1	
p-Isopropyltoluene	ND	1.0	1	
Methylene Chloride	ND	10	1	
4-Methyl-2-Pentanone	ND	10	1	
Naphthalene	ND	10	1	
n-Propylbenzene	ND	1.0	1	
Styrene	ND	1.0	1	
1,1,1,2-Tetrachloroethane	ND	1.0	1	
1,1,2,2-Tetrachloroethane	ND	1.0	1	
Tetrachloroethene	ND	1.0	1	
Toluene	ND	1.0	1	
1,2,3-Trichlorobenzene	ND	1.0	1	
1,2,4-Trichlorobenzene	ND	1.0	1	
1,1,1-Trichloroethane	ND	1.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
1,1,2-Trichloroethane	ND	1.0	1	
Trichloroethene	ND	1.0	1	
Trichlorofluoromethane	ND	10	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	1.0	1	
1,3,5-Trimethylbenzene	ND	1.0	1	
Vinyl Acetate	ND	10	1	
Vinyl Chloride	ND	0.50	1	
p/m-Xylene	ND	1.0	1	
o-Xylene	ND	1.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	80-120	
Dibromofluoromethane	111	80-126	
1,2-Dichloroethane-d4	120	80-134	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-001	**13-11-1757-3-A**	**11/21/13 08:00**	**Solid**	**GC/MS V V**	**11/22/13**	**11/22/13 19:17**	**131122L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	94	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-002	**13-11-1757-4-A**	**11/21/13 08:05**	**Solid**	**GC/MS V V**	**11/22/13**	**11/22/13 19:46**	**131122L01**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	6.8	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	
1,1-Dichloropropene	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 30

Parameter	Result	RL	DF	Qualifiers
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	38	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	5.4	5.0	1	
p-Isopropyltoluene	12	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	8.2	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	36	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	14	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	280	5.0	1	
o-Xylene	190	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	107	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
250-I-P/S-SS-002	**13-11-1757-4-A**	**11/21/13 08:05**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 13:54**	**131123L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	60-132	
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	99	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-001	**13-11-1757-6-A**	**11/21/13 10:45**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 00:38**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-002	**13-11-1757-7-A**	**11/21/13 10:48**	**Solid**	**GC/MS V V**	**11/22/13**	**11/22/13 20:16**	**131122L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	92	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-003	**13-11-1757-8-A**	**11/21/13 10:46**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 02:34**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 11 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	90	60-132	
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 12 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-004	**13-11-1757-9-A**	**11/21/13 10:55**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 03:03**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 13 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	90	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	94	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 14 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-005	**13-11-1757-10-A**	**11/21/13 10:57**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 03:33**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 15 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	93	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 16 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-006	**13-11-1757-11-A**	**11/21/13 10:58**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 04:02**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 17 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	93	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 18 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-007	**13-11-1757-12-A**	**11/21/13 10:59**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 04:31**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 19 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	92	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 20 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-008	**13-11-1757-13-A**	**11/21/13 11:00**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 05:00**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 21 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	93	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 22 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-009	**13-11-1757-14-A**	**11/21/13 11:01**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 05:29**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 23 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	92	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 24 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-I-P/S-SS-010	**13-11-1757-15-A**	**11/21/13 11:02**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 05:58**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 25 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 26 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-7870**	**N/A**	**Solid**	**GC/MS V V**	**11/22/13**	**11/22/13 11:30**	**131122L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 27 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	60-132	
Dibromofluoromethane	83	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	92	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 28 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-7873**	**N/A**	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 00:09**	**131122L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 29 of 30

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 30 of 30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-7876**	**N/A**	**Solid**	**GC/MS V V**	**11/23/13**	**11/23/13 11:29**	**131123L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	93	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
32-I-P/S-SS-001	**Solid**	**GC 45**	**11/22/13**	**11/22/13 12:42**	**131122S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	406.8	102	392.6	98	64-130	4	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1667-5	**Solid**	**ICP 7300**	**11/22/13**	**11/22/13 18:49**	**131122S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	9.952	40	9.988	40	50-115	0	0-20	3
Arsenic	14.20	25.00	38.36	97	40.03	103	75-125	4	0-20	
Barium	34.59	25.00	58.88	97	57.18	90	75-125	3	0-20	
Beryllium	ND	25.00	24.43	98	24.84	99	75-125	2	0-20	
Cadmium	ND	25.00	21.83	87	21.85	87	75-125	0	0-20	
Chromium	3.958	25.00	27.31	93	27.52	94	75-125	1	0-20	
Cobalt	1.899	25.00	25.18	93	24.83	92	75-125	1	0-20	
Copper	6.188	25.00	31.70	102	31.90	103	75-125	1	0-20	
Lead	1.249	25.00	32.13	124	30.50	117	75-125	5	0-20	
Molybdenum	1.068	25.00	24.79	95	25.02	96	75-125	1	0-20	
Nickel	3.126	25.00	25.39	89	25.31	89	75-125	0	0-20	
Selenium	ND	25.00	24.61	98	24.88	100	75-125	1	0-20	
Silver	ND	12.50	12.99	104	13.27	106	75-125	2	0-20	
Thallium	ND	25.00	15.11	60	17.47	70	75-125	14	0-20	3
Vanadium	8.699	25.00	33.43	99	33.43	99	75-125	0	0-20	
Zinc	13.31	25.00	35.83	90	35.18	88	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1631-2	**Aqueous**	**ICP 7300**	**11/21/13**	**11/22/13 12:50**	**131121SA3**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	0.5000	0.3841	77	0.4052	81	72-132	5	0-10	
Arsenic	0.02062	0.5000	0.5705	110	0.5660	109	80-140	1	0-11	
Barium	0.1842	0.5000	0.7099	105	0.6955	102	87-123	2	0-6	
Beryllium	ND	0.5000	0.5295	106	0.5267	105	89-119	1	0-8	
Cadmium	ND	0.5000	0.5262	105	0.5173	103	82-124	2	0-7	
Chromium	0.04083	0.5000	0.5530	102	0.5400	100	86-122	2	0-8	
Cobalt	0.01883	0.5000	0.5573	108	0.5558	107	83-125	0	0-7	
Copper	0.04054	0.5000	0.5971	111	0.5871	109	78-126	2	0-7	
Lead	ND	0.5000	0.5270	105	0.5256	105	84-120	0	0-7	
Molybdenum	0.01467	0.5000	0.5028	98	0.5061	98	78-126	1	0-7	
Nickel	0.04715	0.5000	0.5680	104	0.5580	102	84-120	2	0-7	
Selenium	ND	0.5000	0.5363	107	0.5320	106	79-127	1	0-9	
Silver	ND	0.2500	0.2493	100	0.2477	99	86-128	1	0-7	
Thallium	ND	0.5000	0.5014	100	0.5041	101	79-121	1	0-8	
Vanadium	0.04332	0.5000	0.5645	104	0.5502	101	88-118	3	0-7	
Zinc	0.1082	0.5000	0.6711	113	0.6591	110	89-131	2	0-8	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 245.1 Filt.
		Method:	EPA 7470A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1636-2	**Aqueous**	**Mercury**	**11/21/13**	**11/22/13 13:04**	**131121S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.01000	0.009144	91	0.009111	91	57-141	0	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1504-1	**Solid**	**Mercury**	**11/22/13**	**11/22/13 12:29**	**131122S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.1634	0.8350	0.5714	49	0.7172	66	71-137	23	0-14	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
32-I-P/S-SS-003	**Solid**	**GC 31**	**11/21/13**	**11/24/13 18:29**	**121121S18**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	93.70	94	86.47	86	50-135	8	0-25	
Aroclor-1260	ND	100.0	97.30	97	86.33	86	50-135	12	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1532-7	**Aqueous**	**GC/MS QQ**	**11/22/13**	**11/22/13 14:10**	**131122S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acetone	ND	50.00	98.22	196	91.69	183	70-130	7	0-20	3
Benzene	ND	50.00	50.46	101	48.22	96	78-120	5	0-20	
Bromobenzene	ND	50.00	52.47	105	48.40	97	70-130	8	0-20	
Bromochloromethane	ND	50.00	51.71	103	48.50	97	70-130	6	0-20	
Bromodichloromethane	ND	50.00	58.65	117	55.05	110	70-130	6	0-20	
Bromoform	ND	50.00	60.23	120	59.68	119	70-130	1	0-20	
Bromomethane	ND	50.00	64.78	130	61.17	122	70-130	6	0-20	
2-Butanone	ND	50.00	79.69	159	70.75	142	70-130	12	0-20	3
n-Butylbenzene	ND	50.00	50.35	101	48.86	98	70-130	3	0-25	
sec-Butylbenzene	ND	50.00	46.08	92	45.12	90	70-130	2	0-20	
tert-Butylbenzene	ND	50.00	43.30	87	42.86	86	70-130	1	0-20	
Carbon Disulfide	ND	50.00	57.77	116	54.12	108	70-130	7	0-20	
Carbon Tetrachloride	ND	50.00	63.33	127	60.48	121	69-139	5	0-20	
Chlorobenzene	ND	50.00	48.37	97	45.28	91	70-130	7	0-20	
Chloroethane	ND	50.00	48.28	97	47.38	95	70-130	2	0-20	
Chloroform	ND	50.00	57.54	115	53.90	108	70-130	7	0-20	
Chloromethane	ND	50.00	43.57	87	43.11	86	70-130	1	0-20	
2-Chlorotoluene	ND	50.00	52.62	105	49.58	99	70-130	6	0-20	
4-Chlorotoluene	ND	50.00	46.36	93	45.89	92	70-130	1	0-20	
Dibromochloromethane	ND	50.00	59.38	119	55.45	111	70-130	7	0-20	
1,2-Dibromo-3-Chloropropane	ND	50.00	51.12	102	48.45	97	70-130	5	0-20	
1,2-Dibromoethane	ND	50.00	53.11	106	49.20	98	80-123	8	0-20	
Dibromomethane	ND	50.00	56.80	114	52.61	105	70-130	8	0-20	
1,2-Dichlorobenzene	ND	50.00	45.51	91	43.97	88	76-120	3	0-20	
1,3-Dichlorobenzene	ND	50.00	44.79	90	44.27	89	70-130	1	0-20	
1,4-Dichlorobenzene	ND	50.00	48.44	97	46.38	93	70-130	4	0-20	
Dichlorodifluoromethane	ND	50.00	49.17	98	47.88	96	70-130	3	0-20	
1,1-Dichloroethane	ND	50.00	49.30	99	47.00	94	70-130	5	0-20	
1,2-Dichloroethane	ND	50.00	57.49	115	53.83	108	76-130	7	0-20	
1,1-Dichloroethene	ND	50.00	52.63	105	49.14	98	70-130	7	0-27	
c-1,2-Dichloroethene	1.536	50.00	54.44	106	51.44	100	70-130	6	0-20	
t-1,2-Dichloroethene	ND	50.00	52.95	106	49.16	98	70-130	7	0-20	
1,2-Dichloropropane	ND	50.00	50.17	100	46.93	94	70-130	7	0-25	
1,3-Dichloropropane	ND	50.00	51.67	103	47.21	94	70-130	9	0-20	
2,2-Dichloropropane	ND	50.00	51.23	102	49.03	98	70-130	4	0-20	
1,1-Dichloropropene	ND	50.00	53.97	108	50.84	102	70-130	6	0-20	
c-1,3-Dichloropropene	ND	50.00	55.25	110	52.65	105	70-130	5	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 11

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
t-1,3-Dichloropropene	ND	50.00	49.98	100	46.62	93	70-130	7	0-20	
Ethylbenzene	ND	50.00	52.88	106	50.27	101	73-127	5	0-20	
2-Hexanone	ND	50.00	61.87	124	56.28	113	70-130	9	0-20	
Isopropylbenzene	ND	50.00	48.63	97	46.28	93	70-130	5	0-20	
p-Isopropyltoluene	ND	50.00	46.77	94	45.10	90	70-130	4	0-20	
Methylene Chloride	ND	50.00	53.29	107	49.31	99	70-130	8	0-20	
4-Methyl-2-Pentanone	ND	50.00	49.66	99	46.05	92	70-130	8	0-20	
Naphthalene	ND	50.00	45.51	91	43.82	88	70-130	4	0-20	
n-Propylbenzene	ND	50.00	49.94	100	46.15	92	70-130	8	0-20	
Styrene	ND	50.00	51.78	104	48.64	97	70-130	6	0-20	
1,1,1,2-Tetrachloroethane	ND	50.00	56.62	113	53.67	107	70-130	5	0-20	
1,1,2,2-Tetrachloroethane	ND	50.00	47.92	96	46.06	92	70-130	4	0-20	
Tetrachloroethene	ND	50.00	63.27	127	60.43	121	70-130	5	0-20	
Toluene	ND	50.00	52.69	105	49.92	100	72-126	5	0-20	
1,2,3-Trichlorobenzene	ND	50.00	47.93	96	46.30	93	70-130	3	0-20	
1,2,4-Trichlorobenzene	ND	50.00	46.40	93	45.32	91	70-130	2	0-20	
1,1,1-Trichloroethane	ND	50.00	58.52	117	54.89	110	70-130	6	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50.00	57.96	116	54.41	109	70-130	6	0-20	
1,1,2-Trichloroethane	ND	50.00	54.17	108	49.76	100	70-130	8	0-20	
Trichloroethene	ND	50.00	56.74	113	53.55	107	74-122	6	0-20	
Trichlorofluoromethane	ND	50.00	65.71	131	63.44	127	70-130	4	0-20	3
1,2,3-Trichloropropane	ND	50.00	55.99	112	51.21	102	70-130	9	0-20	
1,2,4-Trimethylbenzene	ND	50.00	50.97	102	49.58	99	70-130	3	0-20	
1,3,5-Trimethylbenzene	ND	50.00	56.02	112	53.23	106	70-130	5	0-20	
Vinyl Acetate	ND	50.00	48.10	96	44.83	90	70-130	7	0-20	
Vinyl Chloride	ND	50.00	49.11	98	48.53	97	65-131	1	0-24	
p/m-Xylene	ND	100.0	101.7	102	94.60	95	70-130	7	0-20	
o-Xylene	ND	50.00	49.96	100	46.95	94	70-130	6	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	50.34	101	47.50	95	69-123	6	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1701-3	**Solid**	**GC/MS V V**	**11/21/13**	**11/22/13 12:58**	**131122S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	46.95	94	51.30	103	61-127	9	0-20	
Carbon Tetrachloride	ND	50.00	47.50	95	48.43	97	51-135	2	0-29	
Chlorobenzene	ND	50.00	44.50	89	43.42	87	57-123	2	0-20	
1,2-Dibromoethane	ND	50.00	50.17	100	49.94	100	64-124	0	0-20	
1,2-Dichlorobenzene	ND	50.00	45.03	90	44.97	90	35-131	0	0-25	
1,2-Dichloroethane	ND	50.00	46.72	93	48.40	97	80-120	4	0-20	
1,1-Dichloroethene	ND	50.00	45.23	90	47.89	96	47-143	6	0-25	
Ethylbenzene	ND	50.00	51.88	104	50.27	101	57-129	3	0-22	
Toluene	ND	50.00	49.37	99	50.69	101	63-123	3	0-20	
Trichloroethene	ND	50.00	47.65	95	48.76	98	44-158	2	0-20	
Vinyl Chloride	ND	50.00	49.30	99	49.96	100	49-139	1	0-47	
p/m-Xylene	ND	100.0	104.7	105	101.7	102	70-130	3	0-30	
o-Xylene	ND	50.00	52.43	105	51.23	102	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	49.21	98	47.81	96	57-123	3	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
32-I-P/S-SS-001	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 01:07**	**131122S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	46.22	92	44.75	89	61-127	3	0-20	
Carbon Tetrachloride	ND	50.00	45.17	90	46.02	92	51-135	2	0-29	
Chlorobenzene	ND	50.00	42.11	84	42.34	85	57-123	1	0-20	
1,2-Dibromoethane	ND	50.00	46.74	93	46.72	93	64-124	0	0-20	
1,2-Dichlorobenzene	ND	50.00	42.83	86	44.87	90	35-131	5	0-25	
1,2-Dichloroethane	ND	50.00	44.75	89	44.40	89	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	43.54	87	45.49	91	47-143	4	0-25	
Ethylbenzene	ND	50.00	49.69	99	49.58	99	57-129	0	0-22	
Toluene	ND	50.00	47.86	96	48.25	96	63-123	1	0-20	
Trichloroethene	ND	50.00	58.15	116	55.93	112	44-158	4	0-20	
Vinyl Chloride	ND	50.00	48.85	98	48.57	97	49-139	1	0-47	
p/m-Xylene	ND	100.0	99.96	100	99.78	100	70-130	0	0-30	
o-Xylene	ND	50.00	49.57	99	49.89	100	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	46.42	93	48.48	97	57-123	4	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 11 of 11

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-11-1836-1	**Solid**	**GC/MS V V**	**11/22/13**	**11/23/13 12:56**	**131123S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	47.93	96	49.45	99	61-127	3	0-20	
Carbon Tetrachloride	ND	50.00	46.81	94	47.41	95	51-135	1	0-29	
Chlorobenzene	ND	50.00	45.69	91	45.54	91	57-123	0	0-20	
1,2-Dibromoethane	ND	50.00	51.43	103	51.40	103	64-124	0	0-20	
1,2-Dichlorobenzene	ND	50.00	45.74	91	46.14	92	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	47.41	95	47.92	96	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	46.27	93	46.72	93	47-143	1	0-25	
Ethylbenzene	ND	50.00	52.94	106	52.61	105	57-129	1	0-22	
Toluene	ND	50.00	50.04	100	49.34	99	63-123	1	0-20	
Trichloroethene	ND	50.00	53.70	107	55.15	110	44-158	3	0-20	
Vinyl Chloride	ND	50.00	48.67	97	50.49	101	49-139	4	0-47	
p/m-Xylene	ND	100.0	107.6	108	106.5	107	70-130	1	0-30	
o-Xylene	ND	50.00	53.53	107	53.25	107	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	49.69	99	51.21	102	57-123	3	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure	Date Received:	11/21/13
121 Innovation Drive, Suite 200	Work Order:	13-11-1757
Irvine, CA 92617-3094	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030		Page 1 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-15-490-646	**Solid**	**GC 45**	**11/22/13 12:23**	**131122B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	393.3	98	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 12

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-498-121	**Aqueous**	**GC 45**	**11/22/13**	**11/22/13 20:19**	**131122B09**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	4000	3810	95	3865	97	75-117	1	0-13	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
097-01-002-17673	**Solid**	**ICP 7300**	**11/22/13 18:47**	**131122L01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.01	100	80-120	73-127	
Arsenic	25.00	24.80	99	80-120	73-127	
Barium	25.00	24.90	100	80-120	73-127	
Beryllium	25.00	24.85	99	80-120	73-127	
Cadmium	25.00	25.92	104	80-120	73-127	
Chromium	25.00	25.28	101	80-120	73-127	
Cobalt	25.00	27.71	111	80-120	73-127	
Copper	25.00	25.85	103	80-120	73-127	
Lead	25.00	25.54	102	80-120	73-127	
Molybdenum	25.00	25.03	100	80-120	73-127	
Nickel	25.00	26.02	104	80-120	73-127	
Selenium	25.00	23.89	96	80-120	73-127	
Silver	12.50	12.27	98	80-120	73-127	
Thallium	25.00	25.52	102	80-120	73-127	
Vanadium	25.00	24.42	98	80-120	73-127	
Zinc	25.00	28.03	112	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
097-01-003-13820	**Aqueous**	**ICP 7300**	**11/21/13 22:47**	**131121LA3**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	0.5000	0.5410	108	80-120	73-127	
Arsenic	0.5000	0.5267	105	80-120	73-127	
Barium	0.5000	0.5098	102	80-120	73-127	
Beryllium	0.5000	0.5106	102	80-120	73-127	
Cadmium	0.5000	0.5242	105	80-120	73-127	
Chromium	0.5000	0.5558	111	80-120	73-127	
Cobalt	0.5000	0.5612	112	80-120	73-127	
Copper	0.5000	0.5178	104	80-120	73-127	
Lead	0.5000	0.5348	107	80-120	73-127	
Molybdenum	0.5000	0.5105	102	80-120	73-127	
Nickel	0.5000	0.5638	113	80-120	73-127	
Selenium	0.5000	0.4975	99	80-120	73-127	
Silver	0.2500	0.2539	102	80-120	73-127	
Thallium	0.5000	0.5227	105	80-120	73-127	
Vanadium	0.5000	0.5024	100	80-120	73-127	
Zinc	0.5000	0.5644	113	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-04-008-6736	**Aqueous**	**Mercury**	**11/22/13 12:52**	**131121L04A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.01000	0.009464	95	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-04-007-9847	**Solid**	**Mercury**	**11/22/13 12:24**	**131122L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8273	99	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-02-003-131	**Solid**	**GC 31**	**11/24/13 18:10**	**131121L18**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	89.92	90	50-135	
Aroclor-1260	100.0	94.65	95	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 12

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-640-17	**Aqueous**	**GC 31**	**11/21/13**	**11/25/13 11:11**	**131121L23**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	1.846	92	1.817	91	50-135	2	0-25	
Aroclor-1260	2.000	2.021	101	2.020	101	50-135	0	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-14-001-12560	**Aqueous**	**GC/MS QQ**	**11/22/13 11:13**	**131122L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	53.62	107	80-120	73-127	
Carbon Tetrachloride	50.00	68.07	136	66-138	54-150	
Chlorobenzene	50.00	52.76	106	80-120	73-127	
1,2-Dibromoethane	50.00	53.96	108	80-120	73-127	
1,2-Dichlorobenzene	50.00	51.57	103	80-120	73-127	
1,2-Dichloroethane	50.00	59.36	119	80-129	72-137	
1,1-Dichloroethene	50.00	58.33	117	71-131	61-141	
Ethylbenzene	50.00	54.49	109	80-123	73-130	
Toluene	50.00	55.22	110	79-121	72-128	
Trichloroethene	50.00	59.05	118	80-120	73-127	
Vinyl Chloride	50.00	53.50	107	70-136	59-147	
p/m-Xylene	100.0	105.2	105	75-125	67-133	
o-Xylene	50.00	53.43	107	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	51.14	102	72-126	63-135	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-796-7870	**Solid**	**GC/MS V V**	**11/22/13 10:32**	**131122L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	53.70	107	78-120	71-127	
Carbon Tetrachloride	50.00	50.34	101	49-139	34-154	
Chlorobenzene	50.00	47.23	94	79-120	72-127	
1,2-Dibromoethane	50.00	51.42	103	80-120	73-127	
1,2-Dichlorobenzene	50.00	50.74	101	75-120	68-128	
1,2-Dichloroethane	50.00	51.83	104	80-120	73-127	
1,1-Dichloroethene	50.00	47.62	95	74-122	66-130	
Ethylbenzene	50.00	54.73	109	76-120	69-127	
Toluene	50.00	54.60	109	77-120	70-127	
Trichloroethene	50.00	51.46	103	80-120	73-127	
Vinyl Chloride	50.00	51.00	102	68-122	59-131	
p/m-Xylene	100.0	110.8	111	75-125	67-133	
o-Xylene	50.00	55.68	111	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	49.54	99	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 11 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-796-7873	**Solid**	**GC/MS V V**	**11/22/13 22:41**	**131122L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	46.13	92	78-120	71-127	
Carbon Tetrachloride	50.00	46.26	93	49-139	34-154	
Chlorobenzene	50.00	44.88	90	79-120	72-127	
1,2-Dibromoethane	50.00	50.31	101	80-120	73-127	
1,2-Dichlorobenzene	50.00	50.38	101	75-120	68-128	
1,2-Dichloroethane	50.00	44.64	89	80-120	73-127	
1,1-Dichloroethene	50.00	46.73	93	74-122	66-130	
Ethylbenzene	50.00	52.26	105	76-120	69-127	
Toluene	50.00	50.53	101	77-120	70-127	
Trichloroethene	50.00	49.01	98	80-120	73-127	
Vinyl Chloride	50.00	50.23	100	68-122	59-131	
p/m-Xylene	100.0	104.1	104	75-125	67-133	
o-Xylene	50.00	54.11	108	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	54.49	109	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	11/21/13
121 Innovation Drive, Suite 200		Work Order:	13-11-1757
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 12 of 12

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-796-7876	**Solid**	**GC/MS V V**	**11/23/13 10:30**	**131123L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	49.26	99	78-120	71-127	
Carbon Tetrachloride	50.00	49.18	98	49-139	34-154	
Chlorobenzene	50.00	47.45	95	79-120	72-127	
1,2-Dibromoethane	50.00	52.07	104	80-120	73-127	
1,2-Dichlorobenzene	50.00	51.08	102	75-120	68-128	
1,2-Dichloroethane	50.00	49.07	98	80-120	73-127	
1,1-Dichloroethene	50.00	48.43	97	74-122	66-130	
Ethylbenzene	50.00	54.86	110	76-120	69-127	
Toluene	50.00	52.94	106	77-120	70-127	
Trichloroethene	50.00	49.13	98	80-120	73-127	
Vinyl Chloride	50.00	52.77	106	68-122	59-131	
p/m-Xylene	100.0	111.7	112	75-125	67-133	
o-Xylene	50.00	56.10	112	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	52.33	105	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-11-1757

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3010A Total	469	ICP 7300	1
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7470A	EPA 7470A Total	769	Mercury	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3510C	682	GC 45	1
EPA 8015B (M)	EPA 3550B	682	GC 45	1
EPA 8082	EPA 3510C	669	GC 31	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	510	GC/MS QQ	2
EPA 8260B	EPA 5030C	796	GC/MS V V	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-11-1757 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25776

PROJECT NAME: PECHINEY

DATE: 11/20/13 PAGE 1 OF 2

PROJECT NUMBER: 10627 0030

LABORATORY NAME: CAL SCIENCE

CLIENT INFORMATION: AMEC IRVINE

REPORTING REQUIREMENTS: 13-11-1757

RESULTS TO: STEVEN H. Lowman

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: COURIER

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Ken Cuenin, Kimberly A Chominsky, Stephen Huang

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	8260 VOCs	6010B/7470 METALS	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	11/20/13	1440	CT-1	X	X	X	X	MULTIPLE	W		HCl HNO3	X		7	①
2	11/20/13	1450	CT-2	X	X	X	X	↓	W		↓	X		7	②
3	—	—	TEMP BLANK						W		None	X		1	
3	11/21/13	0800	250-I-P/S-SS-001	X	X	X	X	4oz GLASS JAR	S		None	X		1	Pea gravel
4	11/21/13	0805	250-I-P/S-SS-002	X	X	X	X		S			X		1	Gray Soil
5	11/21/13	0810	250-I-P/S-CS-001	X	X				O			X		1	Black Concrete
6		1045	32-I-P/S-SS-001	X	X	X	X		S			X		1	
7		1048	32-I-P/S-SS-002	X	X	X	X		S			X		1	
8		1046	32-I-P/S-SS-003	X	X	X	X		S			X		1	
9		1055	32-I-P/S-SS-004	X	X	X			S			X		1	
10		1057	32-I-P/S-SS-005	X	X	X			S			X		1	
11		1058	32-I-P/S-SS-006	X	X	X			S			X		1	
12		1059	32-I-P/S-SS-007	X	X	X			S			X		1	
13		1100	32-I-P/S-SS-008	X	X	X			S			X		1	
14		1101	32-I-P/S-SS-009	X	X	X			S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Ken Cuenin COMPANY: AMEC	11/20/13	1500	SIGNATURE: [signature] PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	11/20/13	1500
SIGNATURE: [signature] PRINTED NAME: Kimberly Holland Chominsky COMPANY: AMEC	11/21/13	1400	SIGNATURE: [signature] PRINTED NAME: STEPHEN Huang COMPANY: AMEC	11/21/13	1400
SIGNATURE: [signature] PRINTED NAME: STEPHEN Huang COMPANY: AMEC	11/21/13	1530	SIGNATURE: [signature] PRINTED NAME: DENNY KRAUSEN COMPANY: CEL	11/21/13	15:30
DENNY KRAUSEN	11/21/13	1730	[signature]	11/21/13	1730

TOTAL NUMBER OF CONTAINERS: ~~15~~ 21

SAMPLING COMMENTS: SDG#1 SH 11/21/13

① water sample from cooling tower sump, SW corner

② water sample from cooling tower sump, SE corner

Temperature Blank Submitted w/ SDG#2

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

NB 27316

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney

DATE: 11/21/13 PAGE 2 OF 2

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC Irvine Office (949) 642-0245

REPORTING REQUIREMENTS: (1757)

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chomunsky, Stephen Thomas

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	EPA 8015 (TPH)	EPA 8260 (VOCs)	6000/7000 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
15	11-21-13	1102	32-I-P/S-SS-010	X	X	X		4 oz glass jar	S		None	X		1	
16		1245	59-I-P/S-CS-010	X					O			X		1	
17		1247	59-I-P/S-CS-011	X					O			X		1	
18		1255	59-I-P/S-CS-012	X					O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Stephen Thomas COMPANY: AMEC	11/21/13	1530	SIGNATURE: [signature] PRINTED NAME: DONNY IPAUWAN COMPANY: CEL	11/21/13	15.30
SIGNATURE: [signature] PRINTED NAME: DONNY IPAUWAN COMPANY: CEL	11/21/13	1730	SIGNATURE: [signature] PRINTED NAME: J. PATEL COMPANY: KEL	11/21/13	1730
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: (4)

SAMPLING COMMENTS: SDG#1

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-11-1757

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Amec

DATE: 11/21/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.2 °C (CF) = 2.0 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☑VOAh (3) ☐VOA**na₂** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na₂** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☑250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☑500PB n

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na₂** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 802

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 681

Preservative: h: HCL n: HNO_3 na₂: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 681

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-12-0264

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 12/10/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 13-12-0264

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-12-0264 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 12/04/13. They were assigned to Work Order 13-12-0264.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-12-0264
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	12/04/13 17:05
		Number of Containers:	14
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
289-IIA-P/S-SS-001	13-12-0264-1	12/03/13 15:05	1	Solid
292-IIA-P/S-SS-001	13-12-0264-2	12/04/13 07:33	1	Solid
208-I-P-SS-005	13-12-0264-3	12/04/13 08:49	1	Solid
257-IIB-O-SS-005	13-12-0264-4	12/04/13 13:20	1	Solid
293-IV-P/S-CS-001	13-12-0264-5	12/04/13 12:25	1	Solid
293-IV-P/S-CS-002	13-12-0264-6	12/04/13 12:30	1	Solid
293-IV-P/S-CS-003	13-12-0264-7	12/04/13 12:35	1	Solid
293-IV-P/S-CS-004	13-12-0264-8	12/04/13 12:40	1	Solid
293-IV-P/S-CS-005	13-12-0264-9	12/04/13 12:43	1	Solid
293-IV-P/S-CS-006	13-12-0264-10	12/04/13 12:50	1	Solid
293-IV-P/S-CS-007	13-12-0264-11	12/04/13 12:55	1	Solid
293-IV-P/S-CS-008	13-12-0264-12	12/04/13 13:00	1	Solid
293-IV-P/S-CS-009	13-12-0264-13	12/04/13 13:04	1	Solid
293-IV-P/S-CS-010	13-12-0264-14	12/04/13 13:08	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	13-12-0264
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	12/04/13
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
289-IIA-P/S-SS-001 (13-12-0264-1)						
C29-C32	5.8		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	1500		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	440		50	ug/kg	EPA 8082	EPA 3540C
292-IIA-P/S-SS-001 (13-12-0264-2)						
Aroclor-1260	85		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-001 (13-12-0264-5)						
Aroclor-1248	270		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	63		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-002 (13-12-0264-6)						
Aroclor-1248	500		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-003 (13-12-0264-7)						
Aroclor-1248	92000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	4700		500	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-004 (13-12-0264-8)						
Aroclor-1248	180000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	11000		5000	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-005 (13-12-0264-9)						
Aroclor-1248	150		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-006 (13-12-0264-10)						
Aroclor-1248	230000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	22000		5000	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-007 (13-12-0264-11)						
Aroclor-1248	85000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	5600		500	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-008 (13-12-0264-12)						
Aroclor-1248	130000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	5800		500	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-009 (13-12-0264-13)						
Aroclor-1248	220000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	5900		500	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-010 (13-12-0264-14)						
Aroclor-1248	68000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1500		500	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289-IIA-P/S-SS-001	**13-12-0264-1-A**	**12/03/13 15:05**	**Solid**	**GC 46**	**12/02/13**	**12/05/13 09:57**	**131204B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	5.8	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	24	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-666**	**N/A**	**Solid**	**GC 46**	**12/04/13**	**12/05/13 00:19**	**131204B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289-IIA-P/S-SS-001	**13-12-0264-1-A**	**12/03/13 15:05**	**Solid**	**GC 31**	**12/04/13**	**12/06/13 18:08**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	440	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	138	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1500	250	5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	131	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
292-IIA-P/S-SS-001	**13-12-0264-2-A**	**12/04/13 07:33**	**Solid**	**GC 31**	**12/04/13**	**12/06/13 18:27**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	85	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
257-IIB-O-SS-005	**13-12-0264-4-A**	**12/04/13 13:20**	**Solid**	**GC 31**	**12/04/13**	**12/06/13 19:05**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	270	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	63	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-002	**13-12-0264-6-A**	**12/04/13 12:30**	**Solid**	**GC 31**	**12/04/13**	**12/06/13 19:43**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	500	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1254	ND	500	10	
Aroclor-1260	4700	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-003	**13-12-0264-7-A**	**12/04/13 12:35**	**Solid**	**GC 31**	**12/04/13**	**12/07/13 20:48**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	92000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	11000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	173	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	180000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-005	**13-12-0264-9-A**	**12/04/13 12:43**	**Solid**	**GC 31**	**12/04/13**	**12/06/13 20:40**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	150	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	22000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	167	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	254	50-130	1,2,7

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-006	**13-12-0264-10-A**	**12/04/13 12:50**	**Solid**	**GC 31**	**12/04/13**	**12/07/13 21:26**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	230000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1254	ND	500	10	
Aroclor-1260	5600	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	85000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-008	**13-12-0264-12-A**	**12/04/13 13:00**	**Solid**	**GC 31**	**12/04/13**	**12/08/13 00:36**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1254	ND	500	10	
Aroclor-1260	5800	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	130000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-009	**13-12-0264-13-A**	**12/04/13 13:04**	**Solid**	**GC 31**	**12/04/13**	**12/08/13 00:55**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1254	ND	500	10	
Aroclor-1260	5900	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	220000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-010	**13-12-0264-14-A**	**12/04/13 13:08**	**Solid**	**GC 31**	**12/04/13**	**12/08/13 01:14**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10	
Aroclor-1221	ND	500	10	
Aroclor-1232	ND	500	10	
Aroclor-1242	ND	500	10	
Aroclor-1254	ND	500	10	
Aroclor-1260	1500	500	10	
Aroclor-1262	ND	500	10	
Aroclor-1268	ND	500	10	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	68000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-140**	**N/A**	**Solid**	**GC 31**	**12/04/13**	**12/06/13 16:14**	**131204L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289-IIA-P/S-SS-001	**13-12-0264-1-A**	**12/03/13 15:05**	**Solid**	**GC/MS CC**	**12/04/13**	**12/04/13 22:57**	**131204L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	93	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-7905**	**N/A**	**Solid**	**GC/MS CC**	**12/04/13**	**12/04/13 14:18**	**131204L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1	
Benzene	ND	5.0	1	
Bromobenzene	ND	5.0	1	
Bromochloromethane	ND	5.0	1	
Bromodichloromethane	ND	5.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	25	1	
2-Butanone	ND	50	1	
n-Butylbenzene	ND	5.0	1	
sec-Butylbenzene	ND	5.0	1	
tert-Butylbenzene	ND	5.0	1	
Carbon Disulfide	ND	50	1	
Carbon Tetrachloride	ND	5.0	1	
Chlorobenzene	ND	5.0	1	
Chloroethane	ND	5.0	1	
Chloroform	ND	5.0	1	
Chloromethane	ND	25	1	
2-Chlorotoluene	ND	5.0	1	
4-Chlorotoluene	ND	5.0	1	
Dibromochloromethane	ND	5.0	1	
1,2-Dibromo-3-Chloropropane	ND	10	1	
1,2-Dibromoethane	ND	5.0	1	
Dibromomethane	ND	5.0	1	
1,2-Dichlorobenzene	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1	
Dichlorodifluoromethane	ND	5.0	1	
1,1-Dichloroethane	ND	5.0	1	
1,2-Dichloroethane	ND	5.0	1	
1,1-Dichloroethene	ND	5.0	1	
c-1,2-Dichloroethene	ND	5.0	1	
t-1,2-Dichloroethene	ND	5.0	1	
1,2-Dichloropropane	ND	5.0	1	
1,3-Dichloropropane	ND	5.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	12/04/13
121 Innovation Drive, Suite 200	Work Order:	13-12-0264
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1	
c-1,3-Dichloropropene	ND	5.0	1	
t-1,3-Dichloropropene	ND	5.0	1	
Ethylbenzene	ND	5.0	1	
2-Hexanone	ND	50	1	
Isopropylbenzene	ND	5.0	1	
p-Isopropyltoluene	ND	5.0	1	
Methylene Chloride	ND	50	1	
4-Methyl-2-Pentanone	ND	50	1	
Naphthalene	ND	50	1	
n-Propylbenzene	ND	5.0	1	
Styrene	ND	5.0	1	
1,1,1,2-Tetrachloroethane	ND	5.0	1	
1,1,2,2-Tetrachloroethane	ND	5.0	1	
Tetrachloroethene	ND	5.0	1	
Toluene	ND	5.0	1	
1,2,3-Trichlorobenzene	ND	10	1	
1,2,4-Trichlorobenzene	ND	5.0	1	
1,1,1-Trichloroethane	ND	5.0	1	
1,1,2-Trichloroethane	ND	5.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1	
Trichloroethene	ND	5.0	1	
1,2,3-Trichloropropane	ND	5.0	1	
1,2,4-Trimethylbenzene	ND	5.0	1	
Trichlorofluoromethane	ND	50	1	
1,3,5-Trimethylbenzene	ND	5.0	1	
Vinyl Acetate	ND	50	1	
Vinyl Chloride	ND	5.0	1	
p/m-Xylene	ND	5.0	1	
o-Xylene	ND	5.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-12-0165-1	**Solid**	**GC 46**	**12/04/13**	**12/05/13 00:52**	**131204S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	11980	400.0	9438	0	9132	0	64-130	3	0-15	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
292-IIA-P/S-SS-001	**Solid**	**GC 31**	**12/04/13**	**12/06/13 22:35**	**131204S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	106.2	106	95.96	96	50-135	10	0-25	
Aroclor-1260	85.04	100.0	128.8	44	158.8	74	50-135	21	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-12-0196-5	**Solid**	**GC/MS CC**	**12/04/13**	**12/04/13 15:43**	**131204S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	45.99	92	42.54	85	61-127	8	0-20	
Carbon Tetrachloride	ND	50.00	43.56	87	40.19	80	51-135	8	0-29	
Chlorobenzene	ND	50.00	42.15	84	36.07	72	57-123	16	0-20	
1,2-Dibromoethane	ND	50.00	46.58	93	42.04	84	64-124	10	0-20	
1,2-Dichlorobenzene	ND	50.00	46.34	93	37.34	75	35-131	22	0-25	
1,2-Dichloroethane	ND	50.00	46.67	93	41.77	84	80-120	11	0-20	
1,1-Dichloroethene	ND	50.00	45.90	92	39.40	79	47-143	15	0-25	
Ethylbenzene	ND	50.00	45.31	91	42.14	84	57-129	7	0-22	
Toluene	ND	50.00	48.68	97	42.11	84	63-123	14	0-20	
Trichloroethene	ND	50.00	47.44	95	40.31	81	44-158	16	0-20	
Vinyl Chloride	ND	50.00	49.00	98	44.63	89	49-139	9	0-47	
p/m-Xylene	ND	100.0	86.40	86	74.08	74	70-130	15	0-30	
o-Xylene	ND	50.00	42.43	85	39.97	80	70-130	6	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	49.82	100	42.22	84	57-123	17	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-15-490-666	**Solid**	**GC 46**	**12/05/13 00:36**	**131204B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	439.3	110	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-02-003-140	**Solid**	**GC 31**	**12/06/13 15:55**	**131204L12**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	108.6	109	50-135	
Aroclor-1260	100.0	112.4	112	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	12/04/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0264
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-796-7905	**Solid**	**GC/MS CC**	**12/04/13 13:22**	**131204L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	46.68	93	78-120	71-127	
Carbon Tetrachloride	50.00	46.56	93	49-139	34-154	
Chlorobenzene	50.00	42.74	85	79-120	72-127	
1,2-Dibromoethane	50.00	46.44	93	80-120	73-127	
1,2-Dichlorobenzene	50.00	43.95	88	75-120	68-128	
1,2-Dichloroethane	50.00	46.03	92	80-120	73-127	
1,1-Dichloroethene	50.00	44.09	88	74-122	66-130	
Ethylbenzene	50.00	46.30	93	76-120	69-127	
Toluene	50.00	45.81	92	77-120	70-127	
Trichloroethene	50.00	46.28	93	80-120	73-127	
Vinyl Chloride	50.00	46.51	93	68-122	59-131	
p/m-Xylene	100.0	88.27	88	75-125	67-133	
o-Xylene	50.00	42.32	85	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	46.96	94	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-12-0264

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	900	GC/MS CC	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-12-0264 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

12/4/13 (update) NB 27322

PROJECT NAME: Former Pentney Cast Plate			DATE: 12/3/13 PAGE 1 OF 1
PROJECT NUMBER: 06170030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC Irvine Office (949) 642-0245	REPORTING REQUIREMENTS: 13-12-0264
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: Las Courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Stephen Henry, Kimberly Chomansky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	PCBs (EPA 8082)	TPH (EPA 8015)	VOCs (EPA 8260)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	12/3/13	1505	289-IIA-P/S-SS-001	X	X		4 oz glass jar	S		None	X		1	
2	12/4/13	0733	292-IIA-P/S-SS-001	X				S			X		1	
3	12/4/13	0849	208-I-P-SS-005	X				S			X		1	
4	12/4/13	1320	257-IIB-O-SS-005	X				S			X		1	
5		1225	293-IV-P/S-CS-001	X				S			X		1	
6		1230	293-IV-P/S-CS-002	X				S			X		1	
7		1235	293-IV-P/S-CS-003	X				S			X		1	
8		1240	293-IV-P/S-CS-004	X				S			X		1	
9		1243	293-IV-P/S-CS-005	X				S			X		1	
10		1250	293-IV-P/S-CS-006	X				S			X		1	
11		1255	293-IV-P/S-CS-007	X				S			X		1	
12		1300	293-IV-P/S-CS-008	X				S			X		1	
13		1304	293-IV-P/S-CS-009	X				S			X		1	
14		1308	293-IV-P/S-CS-010	X				S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Stephen Henry COMPANY: AMEC	12/4/13	1507	SIGNATURE: [signature] PRINTED NAME: Alex Marquez COMPANY: CEL	12/4/13	1507
SIGNATURE: [signature] PRINTED NAME: Alex Marquez COMPANY: CEL	12/4/13	1705	SIGNATURE: [signature] PRINTED NAME: J. Patel COMPANY: CEL	12/4/13	1705
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS:

Temp blank submitted.

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-12-0264

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 12/4/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.5 °C - 0.2 °C (CF) = 2.3 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na_2:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-12-0392

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 12/09/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 106270030
Work Order Number: 13-12-0392

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3 Detections Summary. 5

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-12-0392 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 12/05/13. They were assigned to Work Order 13-12-0392.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-12-0392
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		PO Number:	
		Date/Time Received:	12/05/13 17:20
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
293-IV-P/S-CS-011	13-12-0392-1	12/05/13 13:20	1	Solid
293-IV-P/S-CS-012	13-12-0392-2	12/05/13 13:24	1	Solid
293-IV-P/S-CS-013	13-12-0392-3	12/05/13 13:27	1	Solid
293-IV-P/S-CS-014	13-12-0392-4	12/05/13 13:30	1	Solid
293-IV-P/S-CS-015	13-12-0392-5	12/05/13 13:33	1	Solid
293-IV-P/S-CS-016	13-12-0392-6	12/05/13 13:37	1	Solid
293-IV-P/S-CS-017	13-12-0392-7	12/05/13 13:39	1	Solid
293-IV-P/S-CS-018	13-12-0392-8	12/05/13 13:42	1	Solid
293-IV-P/S-CS-019	13-12-0392-9	12/05/13 13:45	1	Solid
293-IV-P/S-CS-020	13-12-0392-10	12/05/13 13:48	1	Solid
293-IV-P/S-CS-021	13-12-0392-11	12/05/13 13:50	1	Solid
293-IV-P/S-CS-022	13-12-0392-12	12/05/13 13:53	1	Solid
293-IV-P/S-CS-023	13-12-0392-13	12/05/13 13:56	1	Solid
293-IV-P/S-CS-024	13-12-0392-14	12/05/13 13:59	1	Solid
293-IV-P/S-CS-025	13-12-0392-15	12/05/13 14:06	1	Solid
293-IV-P/S-CS-026	13-12-0392-16	12/05/13 14:09	1	Solid
293-IV-P/S-CS-027	13-12-0392-17	12/05/13 14:12	1	Solid
293-IV-P/S-CS-028	13-12-0392-18	12/05/13 14:15	1	Solid
293-IV-P/S-CS-029	13-12-0392-19	12/05/13 14:17	1	Solid
293-IV-P/S-CS-030	13-12-0392-20	12/05/13 14:20	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-12-0392
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	12/05/13
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
293-IV-P/S-CS-011 (13-12-0392-1)						
Aroclor-1248	150		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-012 (13-12-0392-2)						
Aroclor-1248	51		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-013 (13-12-0392-3)						
Aroclor-1248	350		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	90		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-014 (13-12-0392-4)						
Aroclor-1248	62		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-015 (13-12-0392-5)						
Aroclor-1248	94		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-018 (13-12-0392-8)						
Aroclor-1248	77		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	56		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-019 (13-12-0392-9)						
Aroclor-1248	150		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-021 (13-12-0392-11)						
Aroclor-1248	390		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	63		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-022 (13-12-0392-12)						
Aroclor-1248	660		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	86		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-025 (13-12-0392-15)						
Aroclor-1248	78		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-026 (13-12-0392-16)						
Aroclor-1248	69		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-028 (13-12-0392-18)						
Aroclor-1248	57		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-029 (13-12-0392-19)						
Aroclor-1248	79		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	55		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-030 (13-12-0392-20)						
Aroclor-1248	200		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	120		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-011	**13-12-0392-1-A**	**12/05/13 13:20**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 07:16**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	150	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	51	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-013	**13-12-0392-3-A**	**12/05/13 13:27**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 07:54**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	350	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	90	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	62	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-015	**13-12-0392-5-A**	**12/05/13 13:33**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 08:32**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	94	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-017	**13-12-0392-7-A**	**12/05/13 13:39**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 09:10**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	77	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	56	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-019	**13-12-0392-9-A**	**12/05/13 13:45**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 09:48**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	150	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-021	**13-12-0392-11-A**	**12/05/13 13:50**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 10:26**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	390	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	63	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	660	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	86	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-023	**13-12-0392-13-A**	**12/05/13 13:56**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 11:04**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-025	**13-12-0392-15-A**	**12/05/13 14:06**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 12:39**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	78	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	133	50-130	2,7

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	69	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-027	**13-12-0392-17-A**	**12/05/13 14:12**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 13:18**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	57	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-029	**13-12-0392-19-A**	**12/05/13 14:17**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 13:56**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	79	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	55	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	200	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	120	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-142**	**N/A**	**Solid**	**GC 31**	**12/05/13**	**12/08/13 06:19**	**131205L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	
Aroclor-1268	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
293-IV-P/S-CS-013	**Solid**	**GC 31**	**12/05/13**	**12/08/13 06:38**	**131205S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	264.9	265	203.2	203	50-135	26	0-25	3,4
Aroclor-1260	90.32	100.0	203.2	113	455.2	365	50-135	77	0-25	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	12/05/13
121 Innovation Drive, Suite 200		Work Order:	13-12-0392
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-02-003-142	**Solid**	**GC 31**	**12/08/13 06:00**	**131205L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	103.1	103	50-135	
Aroclor-1260	100.0	101.2	101	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-12-0392

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-12-0392

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 27324

PROJECT NAME: Former Refinery Cent Plant	LABORATORY NAME: Calscience	CLIENT INFORMATION:	DATE: 12/5/13 PAGE 1 OF 2
PROJECT NUMBER: 01Ub270030	LABORATORY ADDRESS:		REPORTING REQUIREMENTS:
RESULTS TO: L. Conlan			13-12-0392
TURNAROUND TIME: 48-Hr			
SAMPLE SHIPMENT METHOD: Las Courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES: EPA 8082 PCBs

	DATE	TIME	SAMPLE NUMBER	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	12/5/13	1320	293-IV-P/S-CS-011	4 oz glass jar	O		None	X		1	
2		1324	293-IV-P/S-CS-012							1	
3		1327	293-IV-P/S-CS-013							1	
4		1330	293-IV-P/S-CS-014							1	
5		1333	293-IV-P/S-CS-015							1	
6		1337	293-IV-P/S-CS-016							1	
7		1339	293-IV-P/S-CS-017							1	
8		1342	293-IV-P/S-CS-018							1	
9		1345	293-IV-P/S-CS-019							1	
10		1348	293-IV-P/S-CS-020							1	
11		1350	293-IV-P/S-CS-021							1	
12		1353	293-IV-P/S-CS-022							1	
13		1356	293-IV-P/S-CS-023							1	
14		1359	293-IV-P/S-CS-024							1	
15		1406	293-IV-P/S-CS-025							1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	12/5/13	1510	SIGNATURE:	12/05/13	15.10
PRINTED NAME: Jeffrey Hang			PRINTED NAME: DENNY IRAWAN		
COMPANY: AMEC			COMPANY: CEL		
SIGNATURE:	12/05/13	17.20	SIGNATURE:	12/5/13	17:20
PRINTED NAME: DENNY IRAWAN			PRINTED NAME: DANNY LE		
COMPANY: CEL			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS:

Temp Blank Submitted

"Cooling Tower"

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 27325

PROJECT NAME: Former Refinery Cart plate

DATE: 12/5/13

PAGE 2 OF 2

PROJECT NUMBER: 01062270030

RESULTS TO: L. Conlan

TURNAROUND TIME: 48-HRS

SAMPLE SHIPMENT METHOD: Lab Courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Sera Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS: 0392

GEOTRACKER REQUIRED: YES / NO (NO circled)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES: 8260B/8270C/PCB

	DATE	TIME	SAMPLE NUMBER	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	12/5/13	1409	293-IV-P/S-CS-026	4oz glass jar	O		None	X		1	
17		1412	293-IV-P/S-CS-027							1	
18		1415	293-IV-P/S-CS-028							1	
19		1417	293-IV-P/S-CS-029							1	
20		1420	293-IV-P/S-CS-030							1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: / PRINTED NAME: Stephen Kang / COMPANY: AMEC	12/5/13	15:10	SIGNATURE: / PRINTED NAME: DENNY IRAVZAN / COMPANY:	12/05/13	15.10
SIGNATURE: / PRINTED NAME: DENNY IRAVZAN / COMPANY: CEL	12/05/13	17.20	SIGNATURE: Dannyle / PRINTED NAME: DANNY LE / COMPANY: CEL	12/5/13	17:20
SIGNATURE: / PRINTED NAME: / COMPANY:			SIGNATURE: / PRINTED NAME: / COMPANY:		

TOTAL NUMBER OF CONTAINERS: 5

SAMPLING COMMENTS:

Temp Blank Submitted.

"Cooling Tower"

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-12-0392

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 12/05/13

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.9 °C - 0.2 °C (CF) = 2.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® ☐ TerraCores® ☐_____

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na_2** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 1AGB ☐ 1AGB**na_2** ☐ 1AGB**s**

☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 1PB ☐ 1PB**na** ☐ 500PB

☐ 250PB ☐ 250PB**n** ☐ 125PB ☐ 125PB**znna** ☐ 100PJ ☐ 100PJ**na_2** ☐_____ ☐_____ ☐_____

Air: ☐ Tedlar® ☐ Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 200

Preservative: **h:** HCL **n:** HNO_3 **na_2:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 300

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-02-1436

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 02/25/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Pechiney / 106270030
Work Order Number: 14-02-1436

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/20/14. They were assigned to Work Order 14-02-1436.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1436
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	02/20/14 17:00
		Number of Containers:	7
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#833	14-02-1436-1	02/20/14 10:50	1	Solid
#834	14-02-1436-2	02/20/14 11:05	1	Solid
#835	14-02-1436-3	02/20/14 11:30	1	Solid
142-I-P/S-CS-001	14-02-1436-4	02/20/14 14:20	1	Other
142-I-P/S-CS-002	14-02-1436-5	02/20/14 14:25	1	Other
142-I-P/S-CS-003	14-02-1436-6	02/20/14 14:52	1	Other
142-I-P/S-CS-004	14-02-1436-7	02/20/14 14:58	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1436
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	02/20/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#833 (14-02-1436-1)						
Arsenic	0.965		0.721	mg/kg	EPA 6010B	EPA 3050B
Barium	151		0.481	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.508		0.240	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.9		0.240	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.2		0.240	mg/kg	EPA 6010B	EPA 3050B
Copper	10.9		0.481	mg/kg	EPA 6010B	EPA 3050B
Lead	3.83		0.481	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.4		0.240	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.5		0.240	mg/kg	EPA 6010B	EPA 3050B
Zinc	37.5		0.962	mg/kg	EPA 6010B	EPA 3050B
#834 (14-02-1436-2)						
Arsenic	1.19		0.728	mg/kg	EPA 6010B	EPA 3050B
Barium	98.2		0.485	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.411		0.243	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.7		0.243	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.48		0.243	mg/kg	EPA 6010B	EPA 3050B
Copper	9.87		0.485	mg/kg	EPA 6010B	EPA 3050B
Lead	6.81		0.485	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.24		0.243	mg/kg	EPA 6010B	EPA 3050B
Vanadium	26.9		0.243	mg/kg	EPA 6010B	EPA 3050B
Zinc	36.9		0.971	mg/kg	EPA 6010B	EPA 3050B
#835 (14-02-1436-3)						
Barium	155		0.518	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.606		0.259	mg/kg	EPA 6010B	EPA 3050B
Chromium	20.6		0.259	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.9		0.259	mg/kg	EPA 6010B	EPA 3050B
Copper	16.0		0.518	mg/kg	EPA 6010B	EPA 3050B
Lead	10.4		0.518	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.4		0.259	mg/kg	EPA 6010B	EPA 3050B
Vanadium	41.3		0.259	mg/kg	EPA 6010B	EPA 3050B
Zinc	78.5		1.04	mg/kg	EPA 6010B	EPA 3050B
C29-C32	7.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	5.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	5.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	34		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1436
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	02/20/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#833	**14-02-1436-1-A**	**02/20/14 10:50**	**Solid**	**GC 46**	**02/20/14**	**02/21/14 01:00**	**140220B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#834	**14-02-1436-2-A**	**02/20/14 11:05**	**Solid**	**GC 46**	**02/20/14**	**02/21/14 01:18**	**140220B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	87	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#835	**14-02-1436-3-A**	**02/20/14 11:30**	**Solid**	**GC 46**	**02/20/14**	**02/21/14 01:36**	**140220B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	7.0	5.0	1.00	
C33-C36	5.6	5.0	1.00	
C37-C40	5.3	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	34	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-782**	**N/A**	**Solid**	**GC 46**	**02/20/14**	**02/20/14 22:38**	**140220B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#833	**14-02-1436-1-A**	**02/20/14 10:50**	**Solid**	**ICP 7300**	**02/20/14**	**02/21/14 13:09**	**140220L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.721	0.962	
Arsenic	0.965	0.721	0.962	
Barium	151	0.481	0.962	
Beryllium	0.508	0.240	0.962	
Cadmium	ND	0.481	0.962	
Chromium	15.9	0.240	0.962	
Cobalt	10.2	0.240	0.962	
Copper	10.9	0.481	0.962	
Lead	3.83	0.481	0.962	
Molybdenum	ND	0.240	0.962	
Nickel	11.4	0.240	0.962	
Selenium	ND	0.721	0.962	
Silver	ND	0.240	0.962	
Thallium	ND	0.721	0.962	
Vanadium	32.5	0.240	0.962	
Zinc	37.5	0.962	0.962	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#834	**14-02-1436-2-A**	**02/20/14 11:05**	**Solid**	**ICP 7300**	**02/20/14**	**02/21/14 13:10**	**140220L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.728	0.971	
Arsenic	1.19	0.728	0.971	
Barium	98.2	0.485	0.971	
Beryllium	0.411	0.243	0.971	
Cadmium	ND	0.485	0.971	
Chromium	12.7	0.243	0.971	
Cobalt	8.48	0.243	0.971	
Copper	9.87	0.485	0.971	
Lead	6.81	0.485	0.971	
Molybdenum	ND	0.243	0.971	
Nickel	9.24	0.243	0.971	
Selenium	ND	0.728	0.971	
Silver	ND	0.243	0.971	
Thallium	ND	0.728	0.971	
Vanadium	26.9	0.243	0.971	
Zinc	36.9	0.971	0.971	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#835	**14-02-1436-3-A**	**02/20/14 11:30**	**Solid**	**ICP 7300**	**02/20/14**	**02/21/14 13:11**	**140220L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.777	1.04	
Arsenic	ND	0.777	1.04	
Barium	155	0.518	1.04	
Beryllium	0.606	0.259	1.04	
Cadmium	ND	0.518	1.04	
Chromium	20.6	0.259	1.04	
Cobalt	11.9	0.259	1.04	
Copper	16.0	0.518	1.04	
Lead	10.4	0.518	1.04	
Molybdenum	ND	0.259	1.04	
Nickel	12.4	0.259	1.04	
Selenium	ND	0.777	1.04	
Silver	ND	0.259	1.04	
Thallium	ND	0.777	1.04	
Vanadium	41.3	0.259	1.04	
Zinc	78.5	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18039**	**N/A**	**Solid**	**ICP 7300**	**02/20/14**	**02/20/14 21:40**	**140220L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#833	**14-02-1436-1-A**	**02/20/14 10:50**	**Solid**	**Mercury**	**02/20/14**	**02/21/14 12:24**	**140220L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#834	**14-02-1436-2-A**	**02/20/14 11:05**	**Solid**	**Mercury**	**02/20/14**	**02/21/14 12:30**	**140220L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#835	**14-02-1436-3-A**	**02/20/14 11:30**	**Solid**	**Mercury**	**02/20/14**	**02/21/14 12:33**	**140220L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

Method Blank	**099-16-272-33**	**N/A**	**Solid**	**Mercury**	**02/20/14**	**02/21/14 12:08**	**140220L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#833	**14-02-1436-1-A**	**02/20/14 10:50**	**Solid**	**GC 31**	**02/20/14**	**02/23/14 01:10**	**140220L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

#834	**14-02-1436-2-A**	**02/20/14 11:05**	**Solid**	**GC 31**	**02/20/14**	**02/23/14 01:29**	**140220L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#835	**14-02-1436-3-A**	**02/20/14 11:30**	**Solid**	**GC 31**	**02/20/14**	**02/23/14 01:49**	**140220L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

142-I-P/S-CS-001	**14-02-1436-4-A**	**02/20/14 14:20**	**Other**	**GC 31**	**02/20/14**	**02/23/14 02:08**	**140220L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
142-I-P/S-CS-002	**14-02-1436-5-A**	**02/20/14 14:25**	**Other**	**GC 31**	**02/20/14**	**02/23/14 02:27**	**140220L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

142-I-P/S-CS-003	**14-02-1436-6-A**	**02/20/14 14:52**	**Other**	**GC 31**	**02/20/14**	**02/23/14 02:46**	**140220L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
142-I-P/S-CS-004	**14-02-1436-7-A**	**02/20/14 14:58**	**Other**	**GC 31**	**02/20/14**	**02/23/14 03:05**	**140220L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	561	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

Method Blank	**099-02-003-198**	**N/A**	**Solid**	**GC 31**	**02/20/14**	**02/22/14 10:51**	**140220L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1390-4	**Sample**	**Solid**	**GC 46**	**02/20/14**	**02/20/14 23:50**	**140220S03**
14-02-1390-4	**Matrix Spike**	**Solid**	**GC 46**	**02/20/14**	**02/20/14 23:14**	**140220S03**
14-02-1390-4	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**02/20/14**	**02/20/14 23:32**	**140220S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	225.3	400.0	554.8	82	560.6	84	64-130	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1390-3	**Sample**	**Solid**	**ICP 7300**	**02/20/14**	**02/21/14 12:31**	**140220S06**
14-02-1390-3	**Matrix Spike**	**Solid**	**ICP 7300**	**02/20/14**	**02/21/14 12:32**	**140220S06**
14-02-1390-3	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**02/20/14**	**02/21/14 12:33**	**140220S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	1.966	8	1.293	5	50-115	41	0-20	3,4
Arsenic	6.273	25.00	32.20	104	30.17	96	75-125	7	0-20	
Barium	124.8	25.00	167.5	4X	156.9	4X	75-125	4X	0-20	Q
Beryllium	0.4825	25.00	27.04	106	26.04	102	75-125	4	0-20	
Cadmium	ND	25.00	25.92	104	25.01	100	75-125	4	0-20	
Chromium	14.03	25.00	39.59	102	37.80	95	75-125	5	0-20	
Cobalt	7.339	25.00	35.21	112	34.29	108	75-125	3	0-20	
Copper	31.74	25.00	60.77	116	66.02	137	75-125	8	0-20	3
Lead	11.70	25.00	37.89	105	36.87	101	75-125	3	0-20	
Molybdenum	0.7746	25.00	24.41	95	22.92	89	75-125	6	0-20	
Nickel	12.81	25.00	40.72	112	38.62	103	75-125	5	0-20	
Selenium	ND	25.00	21.71	87	20.23	81	75-125	7	0-20	
Silver	ND	12.50	13.32	107	12.96	104	75-125	3	0-20	
Thallium	ND	25.00	23.52	94	23.24	93	75-125	1	0-20	
Vanadium	32.70	25.00	59.74	108	55.79	92	75-125	7	0-20	
Zinc	65.93	25.00	100.3	137	91.15	101	75-125	10	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1390-3	**Sample**	**Solid**	**Mercury**	**02/20/14**	**02/21/14 12:17**	**140220S09**
14-02-1390-3	**Matrix Spike**	**Solid**	**Mercury**	**02/20/14**	**02/21/14 12:19**	**140220S09**
14-02-1390-3	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**02/20/14**	**02/21/14 12:22**	**140220S09**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8745	105	0.8871	106	71-137	1	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#833	**Sample**	**Solid**	**GC 31**	**02/20/14**	**02/23/14 01:10**	**140220S14**
#833	**Matrix Spike**	**Solid**	**GC 31**	**02/20/14**	**02/23/14 03:24**	**140220S14**
#833	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**02/20/14**	**02/23/14 03:43**	**140220S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	97.53	98	95.56	96	50-135	2	0-25	
Aroclor-1260	ND	100.0	104.8	105	92.70	93	50-135	12	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-782	**LCS**	**Solid**	**GC 46**	**02/20/14**	**02/20/14 22:56**	**140220B03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	414.3	104	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18039	**LCS**	**Solid**	**ICP 7300**	**02/20/14**	**02/20/14 21:38**	**140220L06**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.22	101	80-120	73-127	
Arsenic	25.00	24.86	99	80-120	73-127	
Barium	25.00	24.82	99	80-120	73-127	
Beryllium	25.00	24.58	98	80-120	73-127	
Cadmium	25.00	26.12	104	80-120	73-127	
Chromium	25.00	25.57	102	80-120	73-127	
Cobalt	25.00	28.13	113	80-120	73-127	
Copper	25.00	26.42	106	80-120	73-127	
Lead	25.00	26.44	106	80-120	73-127	
Molybdenum	25.00	25.74	103	80-120	73-127	
Nickel	25.00	27.29	109	80-120	73-127	
Selenium	25.00	24.43	98	80-120	73-127	
Silver	12.50	12.95	104	80-120	73-127	
Thallium	25.00	27.13	109	80-120	73-127	
Vanadium	25.00	24.52	98	80-120	73-127	
Zinc	25.00	26.30	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-33	**LCS**	**Solid**	**Mercury**	**02/20/14**	**02/21/14 12:10**	**140220L09**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.9017	108	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/20/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1436
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-198	**LCS**	**Solid**	**GC 31**	**02/20/14**	**02/22/14 10:32**	**140220L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	81.80	82	50-135	
Aroclor-1260	100.0	73.64	74	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-02-1436

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-02-1436

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25726

PROJECT NAME: PECITENRY			DATE: 2/20/14 PAGE 1 OF 1
PROJECT NUMBER: 106270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 14-02-1436
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 Hr			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Ken Conlan

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015 TPH	Title 22	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2-20-14	1050	#833	X	X	X	4oz JAR	S			X		1	
2		1105	#834	X	X	X		S			X		1	
3		1130	#835	X	X	X		S			X		1	
4		1420	142-I-P/S-CS-001	X				O			X		1	
5		1425	142-I-P/S-CS-002	X				O			X		1	
6		1452	142-I-P/S-CS-003	X				O			X		1	
7	2/20/14	1458	142-I-P/S-CS-004	X			4oz JAR	O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Ken Conlan COMPANY: AMEC	2/20/14	1530	SIGNATURE: [signature] PRINTED NAME: Chuoy Vu COMPANY: CAL	2/20/14	1530
SIGNATURE: [signature] PRINTED NAME: Chuoy Vu COMPANY: CAL	2/20/14	1700	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CAL	2/20/14	17:00
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02-1436

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Amec

DATE: 02/20/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.9 °C - 0.3 °C (CF) = 2.6 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 820

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 820

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 659

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 659

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 826

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 826

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-02-1549

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 02/25/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-02-1549

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-02-1549 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/21/14. They were assigned to Work Order 14-02-1549.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1549
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	02/21/14 16:00
		Number of Containers:	92
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#836	14-02-1549-1	02/21/14 08:05	5	Solid
#837	14-02-1549-2	02/21/14 08:25	5	Solid
#838	14-02-1549-3	02/21/14 08:53	5	Solid
#839	14-02-1549-4	02/21/14 09:00	5	Solid
#840	14-02-1549-5	02/21/14 09:20	5	Solid
#841	14-02-1549-6	02/21/14 09:35	5	Solid
#842	14-02-1549-7	02/21/14 10:00	5	Solid
#844	14-02-1549-8	02/21/14 10:30	5	Solid
#843	14-02-1549-9	02/21/14 10:10	5	Solid
#845	14-02-1549-10	02/21/14 10:50	5	Solid
#846	14-02-1549-11	02/21/14 11:20	5	Solid
#847	14-02-1549-12	02/21/14 12:20	5	Solid
#848	14-02-1549-13	02/21/14 12:05	5	Solid
#849	14-02-1549-14	02/21/14 12:30	5	Solid
#850	14-02-1549-15	02/21/14 13:00	5	Solid
#851	14-02-1549-16	02/21/14 13:15	5	Solid
#852	14-02-1549-17	02/21/14 13:30	5	Solid
#853	14-02-1549-18	02/21/14 13:45	5	Solid
QCTB-022114	14-02-1549-19	02/21/14 08:00	2	Aqueous

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1549
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/21/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#836 (14-02-1549-1)						
Arsenic	0.891		0.773	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.515	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.460		0.258	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.7		0.258	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.1		0.258	mg/kg	EPA 6010B	EPA 3050B
Copper	18.8		0.515	mg/kg	EPA 6010B	EPA 3050B
Lead	2.76		0.515	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.451		0.258	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.6		0.258	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.8		0.258	mg/kg	EPA 6010B	EPA 3050B
Zinc	53.9		1.03	mg/kg	EPA 6010B	EPA 3050B
Benzene	1.7		1.1	ug/kg	EPA 8260B	EPA 5035
#837 (14-02-1549-2)						
Arsenic	0.792		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	97.2		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.276		0.256	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.7		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.07		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	13.0		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	4.38		0.513	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.49		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	27.8		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	47.1		1.03	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.286		0.0769	mg/kg	EPA 7471A	EPA 7471A Total
Benzene	2.2		0.95	ug/kg	EPA 8260B	EPA 5035
#838 (14-02-1549-3)						
Arsenic	3.08		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	109		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.394		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.5		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.07		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	14.5		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	3.67		0.495	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.576		0.248	mg/kg	EPA 6010B	EPA 3050B
Nickel	14.9		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.7		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	1170		0.990	mg/kg	EPA 6010B	EPA 3050B
Benzene	1.9		0.97	ug/kg	EPA 8260B	EPA 5035

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1549
		Project Name:	Former Pechiney Cast Plate / 0106270030
		Received:	02/21/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#839 (14-02-1549-4)						
Arsenic	0.895		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	128		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.466		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.4		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.4		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	17.5		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	3.88		0.508	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	1.02		0.254	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.9		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.0		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	56.7		1.02	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.142		0.0862	mg/kg	EPA 7471A	EPA 7471A Total
Benzene	1.9		0.93	ug/kg	EPA 8260B	EPA 5035
#840 (14-02-1549-5)						
Arsenic	1.20		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	121		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.382		0.256	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.7		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.1		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	49.1		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	8.44		0.513	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.3		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.7		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	64.6		1.03	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0795		0.0735	mg/kg	EPA 7471A	EPA 7471A Total
Benzene	2.3		1.0	ug/kg	EPA 8260B	EPA 5035

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-02-1549 Former Pechiney Cast Plate / 0106270030 02/21/14
Attn:	Linda Conlan		Page 3 of 9

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#841 (14-02-1549-6)						
Arsenic	1.12		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	131		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.462		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	18.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	2.28		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.533		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	54.4		1.00	mg/kg	EPA 6010B	EPA 3050B
Benzene	1.7		0.94	ug/kg	EPA 8260B	EPA 5035
#842 (14-02-1549-7)						
Arsenic	0.766		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	48.2		0.503	mg/kg	EPA 6010B	EPA 3050B
Chromium	5.45		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	5.14		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	5.22		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	0.519		0.503	mg/kg	EPA 6010B	EPA 3050B
Nickel	4.42		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	16.4		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	24.7		1.01	mg/kg	EPA 6010B	EPA 3050B
#844 (14-02-1549-8)						
Arsenic	1.89		0.777	mg/kg	EPA 6010B	EPA 3050B
Barium	105		0.518	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.365		0.259	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.5		0.259	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.37		0.259	mg/kg	EPA 6010B	EPA 3050B
Copper	14.2		0.518	mg/kg	EPA 6010B	EPA 3050B
Lead	2.17		0.518	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.3		0.259	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.2		0.259	mg/kg	EPA 6010B	EPA 3050B
Zinc	45.2		1.04	mg/kg	EPA 6010B	EPA 3050B
Benzene	2.1		0.98	ug/kg	EPA 8260B	EPA 5035

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1549
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/21/14
Attn:	Linda Conlan		Page 4 of 9

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#843 (14-02-1549-9)						
Arsenic	1.95		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	122		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.432		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.9		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.7		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	25.4		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	10.6		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.400		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.0		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.6		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	93.0		1.01	mg/kg	EPA 6010B	EPA 3050B
C19-C20	5.8		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	21		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	69		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	120		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	79		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	38		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	350		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	540		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	250		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	87		50	ug/kg	EPA 8082	EPA 3540C
Acetone	130		49	ug/kg	EPA 8260B	EPA 5035
Benzene	2.0		0.99	ug/kg	EPA 8260B	EPA 5035
2-Butanone	25		20	ug/kg	EPA 8260B	EPA 5035
Toluene	1.0		0.99	ug/kg	EPA 8260B	EPA 5035

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1549
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/21/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#845 (14-02-1549-10)						
Arsenic	2.97		0.773	mg/kg	EPA 6010B	EPA 3050B
Barium	101		0.515	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.321		0.258	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.7		0.258	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.07		0.258	mg/kg	EPA 6010B	EPA 3050B
Copper	13.8		0.515	mg/kg	EPA 6010B	EPA 3050B
Lead	5.40		0.515	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.358		0.258	mg/kg	EPA 6010B	EPA 3050B
Nickel	14.5		0.258	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.8		0.258	mg/kg	EPA 6010B	EPA 3050B
Zinc	39.3		1.03	mg/kg	EPA 6010B	EPA 3050B
C25-C28	58		49	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	120		49	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	180		49	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	100		49	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	470		49	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	71		50	ug/kg	EPA 8082	EPA 3540C
Benzene	1.3		0.99	ug/kg	EPA 8260B	EPA 5035
#846 (14-02-1549-11)						
Arsenic	2.49		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	132		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.477		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.4		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	18.2		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	4.33		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.503		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	61.9		1.01	mg/kg	EPA 6010B	EPA 3050B
Benzene	5.1		0.98	ug/kg	EPA 8260B	EPA 5035
Toluene	1.4		0.98	ug/kg	EPA 8260B	EPA 5035

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1549
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/21/14
Attn:	Linda Conlan		Page 6 of 9

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#847 (14-02-1549-12)						
Arsenic	5.72		0.785	mg/kg	EPA 6010B	EPA 3050B
Barium	213		0.524	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.520		0.262	mg/kg	EPA 6010B	EPA 3050B
Chromium	25.0		0.262	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.3		0.262	mg/kg	EPA 6010B	EPA 3050B
Copper	31.8		0.524	mg/kg	EPA 6010B	EPA 3050B
Lead	5.88		0.524	mg/kg	EPA 6010B	EPA 3050B
Nickel	18.6		0.262	mg/kg	EPA 6010B	EPA 3050B
Vanadium	43.9		0.262	mg/kg	EPA 6010B	EPA 3050B
Zinc	61.5		1.05	mg/kg	EPA 6010B	EPA 3050B
C25-C28	14		10	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	32		10	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	38		10	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	29		10	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	140		10	mg/kg	EPA 8015B (M)	EPA 3550B
Benzene	35		0.94	ug/kg	EPA 8260B	EPA 5035
Ethylbenzene	6.4		0.94	ug/kg	EPA 8260B	EPA 5035
Toluene	36		0.94	ug/kg	EPA 8260B	EPA 5035
p/m-Xylene	8.6		1.9	ug/kg	EPA 8260B	EPA 5035
o-Xylene	3.1		0.94	ug/kg	EPA 8260B	EPA 5035
#848 (14-02-1549-13)						
Arsenic	2.69		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	132		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.474		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.1		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.6		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	18.5		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	2.63		0.510	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.605		0.255	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.8		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.3		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	59.0		1.02	mg/kg	EPA 6010B	EPA 3050B
Benzene	2.6		0.91	ug/kg	EPA 8260B	EPA 5035
Toluene	1.1		0.91	ug/kg	EPA 8260B	EPA 5035

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1549
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/21/14
Attn:	Linda Conlan		Page 7 of 9

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#849 (14-02-1549-14)						
Arsenic	1.96		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	135		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.488		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	18.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	5.62		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.930		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	40.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	62.4		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.128		0.0847	mg/kg	EPA 7471A	EPA 7471A Total
C15-C16	57		49	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	170		49	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	290		49	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	320		49	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	290		49	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	420		49	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	540		49	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	540		49	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	430		49	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	310		49	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	3400		49	mg/kg	EPA 8015B (M)	EPA 3550B
Acetone	160		44	ug/kg	EPA 8260B	EPA 5035
#850 (14-02-1549-15)						
Arsenic	1.74		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	126		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.460		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.5		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.7		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	17.8		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	2.30		0.510	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.844		0.255	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.0		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.5		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	56.7		1.02	mg/kg	EPA 6010B	EPA 3050B
Benzene	1.3		0.90	ug/kg	EPA 8260B	EPA 5035
Toluene	1.1		0.90	ug/kg	EPA 8260B	EPA 5035

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1549
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/21/14
Attn:	Linda Conlan		Page 8 of 9

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#851 (14-02-1549-16)						
Arsenic	2.15		0.789	mg/kg	EPA 6010B	EPA 3050B
Barium	132		0.526	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.475		0.263	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.7		0.263	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.8		0.263	mg/kg	EPA 6010B	EPA 3050B
Copper	18.0		0.526	mg/kg	EPA 6010B	EPA 3050B
Lead	3.27		0.526	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.392		0.263	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.1		0.263	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.9		0.263	mg/kg	EPA 6010B	EPA 3050B
Zinc	59.2		1.05	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.241		0.0893	mg/kg	EPA 7471A	EPA 7471A Total
Benzene	2.2		0.88	ug/kg	EPA 8260B	EPA 5035
#852 (14-02-1549-17)						
Barium	115		0.521	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.396		0.260	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.9		0.260	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.5		0.260	mg/kg	EPA 6010B	EPA 3050B
Copper	14.5		0.521	mg/kg	EPA 6010B	EPA 3050B
Lead	2.28		0.521	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.401		0.260	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.1		0.260	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.8		0.260	mg/kg	EPA 6010B	EPA 3050B
Zinc	50.8		1.04	mg/kg	EPA 6010B	EPA 3050B
Benzene	2.4		0.95	ug/kg	EPA 8260B	EPA 5035
#853 (14-02-1549-18)						
Arsenic	1.11		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	100		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.340		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.2		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.98		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	12.2		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	1.42		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.18		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.4		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	43.9		0.985	mg/kg	EPA 6010B	EPA 3050B
Benzene	2.0		0.92	ug/kg	EPA 8260B	EPA 5035
Toluene	0.93		0.92	ug/kg	EPA 8260B	EPA 5035

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1549
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/21/14
Attn:	Linda Conlan		Page 9 of 9

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#836	**14-02-1549-1-A**	**02/21/14 08:05**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 16:05**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#837	**14-02-1549-2-A**	**02/21/14 08:25**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 16:22**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#838	**14-02-1549-3-A**	**02/21/14 08:53**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 16:39**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#839	**14-02-1549-4-A**	**02/21/14 09:00**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 16:55**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#840	**14-02-1549-5-A**	**02/21/14 09:20**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 17:12**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#841	**14-02-1549-6-A**	**02/21/14 09:35**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 17:29**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#842	**14-02-1549-7-A**	**02/21/14 10:00**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 17:46**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#844	**14-02-1549-8-A**	**02/21/14 10:30**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 18:03**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#843	**14-02-1549-9-A**	**02/21/14 10:10**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 20:16**	**140221B24**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	5.8	5.0	0.990	
C21-C22	21	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	69	5.0	0.990	
C29-C32	120	5.0	0.990	
C33-C36	79	5.0	0.990	
C37-C40	38	5.0	0.990	
C41-C44	14	5.0	0.990	
C6-C44 Total	350	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	92	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#845	**14-02-1549-10-A**	**02/21/14 10:50**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 20:33**	**140221B24**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	49	9.80	
C7	ND	49	9.80	
C8	ND	49	9.80	
C9-C10	ND	49	9.80	
C11-C12	ND	49	9.80	
C13-C14	ND	49	9.80	
C15-C16	ND	49	9.80	
C17-C18	ND	49	9.80	
C19-C20	ND	49	9.80	
C21-C22	ND	49	9.80	
C23-C24	ND	49	9.80	
C25-C28	58	49	9.80	
C29-C32	120	49	9.80	
C33-C36	180	49	9.80	
C37-C40	100	49	9.80	
C41-C44	ND	49	9.80	
C6-C44 Total	470	49	9.80	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	130	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#846	**14-02-1549-11-A**	**02/21/14 11:20**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 18:19**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 12 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#847	**14-02-1549-12-A**	**02/21/14 12:20**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 20:51**	**140221B24**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	10	2.00	
C7	ND	10	2.00	
C8	ND	10	2.00	
C9-C10	ND	10	2.00	
C11-C12	ND	10	2.00	
C13-C14	ND	10	2.00	
C15-C16	ND	10	2.00	
C17-C18	ND	10	2.00	
C19-C20	ND	10	2.00	
C21-C22	ND	10	2.00	
C23-C24	ND	10	2.00	
C25-C28	14	10	2.00	
C29-C32	32	10	2.00	
C33-C36	38	10	2.00	
C37-C40	29	10	2.00	
C41-C44	ND	10	2.00	
C6-C44 Total	140	10	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#848	**14-02-1549-13-A**	**02/21/14 12:05**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 18:36**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	97	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 14 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#849	**14-02-1549-14-A**	**02/21/14 12:30**	**Solid**	**GC 47**	**02/21/14**	**02/25/14 09:45**	**140221B24**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	49	9.80	
C7	ND	49	9.80	
C8	ND	49	9.80	
C9-C10	ND	49	9.80	
C11-C12	ND	49	9.80	
C13-C14	ND	49	9.80	
C15-C16	57	49	9.80	
C17-C18	170	49	9.80	
C19-C20	290	49	9.80	
C21-C22	320	49	9.80	
C23-C24	290	49	9.80	
C25-C28	420	49	9.80	
C29-C32	540	49	9.80	
C33-C36	540	49	9.80	
C37-C40	430	49	9.80	
C41-C44	310	49	9.80	
C6-C44 Total	3400	49	9.80	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#850	**14-02-1549-15-A**	**02/21/14 13:00**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 19:09**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 16 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#851	**14-02-1549-16-A**	**02/21/14 13:15**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 19:26**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#852	**14-02-1549-17-A**	**02/21/14 13:30**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 19:43**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 18 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#853	**14-02-1549-18-A**	**02/21/14 13:45**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 19:59**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	103	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-783**	**N/A**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 14:59**	**140221B24**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	107	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#836	**14-02-1549-1-A**	**02/21/14 08:05**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:26**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.773	1.03	
Arsenic	0.891	0.773	1.03	
Barium	129	0.515	1.03	
Beryllium	0.460	0.258	1.03	
Cadmium	ND	0.515	1.03	
Chromium	16.7	0.258	1.03	
Cobalt	11.1	0.258	1.03	
Copper	18.8	0.515	1.03	
Lead	2.76	0.515	1.03	
Molybdenum	0.451	0.258	1.03	
Nickel	12.6	0.258	1.03	
Selenium	ND	0.773	1.03	
Silver	ND	0.258	1.03	
Thallium	ND	0.773	1.03	
Vanadium	36.8	0.258	1.03	
Zinc	53.9	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#837	**14-02-1549-2-A**	**02/21/14 08:25**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:27**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	0.792	0.769	1.03	
Barium	97.2	0.513	1.03	
Beryllium	0.276	0.256	1.03	
Cadmium	ND	0.513	1.03	
Chromium	12.7	0.256	1.03	
Cobalt	9.07	0.256	1.03	
Copper	13.0	0.513	1.03	
Lead	4.38	0.513	1.03	
Molybdenum	ND	0.256	1.03	
Nickel	9.49	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	27.8	0.256	1.03	
Zinc	47.1	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#838	**14-02-1549-3-A**	**02/21/14 08:53**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:28**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	3.08	0.743	0.990	
Barium	109	0.495	0.990	
Beryllium	0.394	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	13.5	0.248	0.990	
Cobalt	9.07	0.248	0.990	
Copper	14.5	0.495	0.990	
Lead	3.67	0.495	0.990	
Molybdenum	0.576	0.248	0.990	
Nickel	14.9	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	32.7	0.248	0.990	
Zinc	1170	0.990	0.990	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#839	**14-02-1549-4-A**	**02/21/14 09:00**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:29**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	0.895	0.761	1.02	
Barium	128	0.508	1.02	
Beryllium	0.466	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	17.4	0.254	1.02	
Cobalt	11.4	0.254	1.02	
Copper	17.5	0.508	1.02	
Lead	3.88	0.508	1.02	
Molybdenum	1.02	0.254	1.02	
Nickel	12.9	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	39.0	0.254	1.02	
Zinc	56.7	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#840	**14-02-1549-5-A**	**02/21/14 09:20**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:30**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	1.20	0.769	1.03	
Barium	121	0.513	1.03	
Beryllium	0.382	0.256	1.03	
Cadmium	ND	0.513	1.03	
Chromium	14.7	0.256	1.03	
Cobalt	10.1	0.256	1.03	
Copper	49.1	0.513	1.03	
Lead	8.44	0.513	1.03	
Molybdenum	ND	0.256	1.03	
Nickel	11.3	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	31.7	0.256	1.03	
Zinc	64.6	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#841	**14-02-1549-6-A**	**02/21/14 09:35**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:31**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.12	0.750	1.00	
Barium	131	0.500	1.00	
Beryllium	0.462	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	16.4	0.250	1.00	
Cobalt	10.8	0.250	1.00	
Copper	18.6	0.500	1.00	
Lead	2.28	0.500	1.00	
Molybdenum	0.533	0.250	1.00	
Nickel	12.5	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	36.7	0.250	1.00	
Zinc	54.4	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#842	**14-02-1549-7-A**	**02/21/14 10:00**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:37**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	0.766	0.754	1.01	
Barium	48.2	0.503	1.01	
Beryllium	ND	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	5.45	0.251	1.01	
Cobalt	5.14	0.251	1.01	
Copper	5.22	0.503	1.01	
Lead	0.519	0.503	1.01	
Molybdenum	ND	0.251	1.01	
Nickel	4.42	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	16.4	0.251	1.01	
Zinc	24.7	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#844	**14-02-1549-8-A**	**02/21/14 10:30**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:38**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.777	1.04	
Arsenic	1.89	0.777	1.04	
Barium	105	0.518	1.04	
Beryllium	0.365	0.259	1.04	
Cadmium	ND	0.518	1.04	
Chromium	13.5	0.259	1.04	
Cobalt	9.37	0.259	1.04	
Copper	14.2	0.518	1.04	
Lead	2.17	0.518	1.04	
Molybdenum	ND	0.259	1.04	
Nickel	10.3	0.259	1.04	
Selenium	ND	0.777	1.04	
Silver	ND	0.259	1.04	
Thallium	ND	0.777	1.04	
Vanadium	30.2	0.259	1.04	
Zinc	45.2	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#843	**14-02-1549-9-A**	**02/21/14 10:10**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:40**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	1.95	0.758	1.01	
Barium	122	0.505	1.01	
Beryllium	0.432	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	16.9	0.253	1.01	
Cobalt	10.7	0.253	1.01	
Copper	25.4	0.505	1.01	
Lead	10.6	0.505	1.01	
Molybdenum	0.400	0.253	1.01	
Nickel	12.0	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	36.6	0.253	1.01	
Zinc	93.0	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#845	**14-02-1549-10-A**	**02/21/14 10:50**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:41**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.773	1.03	
Arsenic	2.97	0.773	1.03	
Barium	101	0.515	1.03	
Beryllium	0.321	0.258	1.03	
Cadmium	ND	0.515	1.03	
Chromium	11.7	0.258	1.03	
Cobalt	7.07	0.258	1.03	
Copper	13.8	0.515	1.03	
Lead	5.40	0.515	1.03	
Molybdenum	0.358	0.258	1.03	
Nickel	14.5	0.258	1.03	
Selenium	ND	0.773	1.03	
Silver	ND	0.258	1.03	
Thallium	ND	0.773	1.03	
Vanadium	32.8	0.258	1.03	
Zinc	39.3	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#846	**14-02-1549-11-A**	**02/21/14 11:20**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:42**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	2.49	0.758	1.01	
Barium	132	0.505	1.01	
Beryllium	0.477	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	17.4	0.253	1.01	
Cobalt	11.8	0.253	1.01	
Copper	18.2	0.505	1.01	
Lead	4.33	0.505	1.01	
Molybdenum	0.503	0.253	1.01	
Nickel	12.8	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	39.8	0.253	1.01	
Zinc	61.9	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 12 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#847	**14-02-1549-12-A**	**02/21/14 12:20**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:43**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.785	1.05	
Arsenic	5.72	0.785	1.05	
Barium	213	0.524	1.05	
Beryllium	0.520	0.262	1.05	
Cadmium	ND	0.524	1.05	
Chromium	25.0	0.262	1.05	
Cobalt	12.3	0.262	1.05	
Copper	31.8	0.524	1.05	
Lead	5.88	0.524	1.05	
Molybdenum	ND	0.262	1.05	
Nickel	18.6	0.262	1.05	
Selenium	ND	0.785	1.05	
Silver	ND	0.262	1.05	
Thallium	ND	0.785	1.05	
Vanadium	43.9	0.262	1.05	
Zinc	61.5	1.05	1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#848	**14-02-1549-13-A**	**02/21/14 12:05**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:44**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	2.69	0.765	1.02	
Barium	132	0.510	1.02	
Beryllium	0.474	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	17.1	0.255	1.02	
Cobalt	11.6	0.255	1.02	
Copper	18.5	0.510	1.02	
Lead	2.63	0.510	1.02	
Molybdenum	0.605	0.255	1.02	
Nickel	12.8	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	38.3	0.255	1.02	
Zinc	59.0	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 14 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#849	**14-02-1549-14-A**	**02/21/14 12:30**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:45**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.96	0.750	1.00	
Barium	135	0.500	1.00	
Beryllium	0.488	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	17.9	0.250	1.00	
Cobalt	11.2	0.250	1.00	
Copper	18.6	0.500	1.00	
Lead	5.62	0.500	1.00	
Molybdenum	0.930	0.250	1.00	
Nickel	12.9	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	40.9	0.250	1.00	
Zinc	62.4	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#850	**14-02-1549-15-A**	**02/21/14 13:00**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:46**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	1.74	0.765	1.02	
Barium	126	0.510	1.02	
Beryllium	0.460	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	17.5	0.255	1.02	
Cobalt	11.7	0.255	1.02	
Copper	17.8	0.510	1.02	
Lead	2.30	0.510	1.02	
Molybdenum	0.844	0.255	1.02	
Nickel	13.0	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	39.5	0.255	1.02	
Zinc	56.7	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 16 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#851	**14-02-1549-16-A**	**02/21/14 13:15**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:47**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.789	1.05	
Arsenic	2.15	0.789	1.05	
Barium	132	0.526	1.05	
Beryllium	0.475	0.263	1.05	
Cadmium	ND	0.526	1.05	
Chromium	17.7	0.263	1.05	
Cobalt	11.8	0.263	1.05	
Copper	18.0	0.526	1.05	
Lead	3.27	0.526	1.05	
Molybdenum	0.392	0.263	1.05	
Nickel	13.1	0.263	1.05	
Selenium	ND	0.789	1.05	
Silver	ND	0.263	1.05	
Thallium	ND	0.789	1.05	
Vanadium	39.9	0.263	1.05	
Zinc	59.2	1.05	1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#852	**14-02-1549-17-A**	**02/21/14 13:30**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:53**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	ND	0.781	1.04	
Barium	115	0.521	1.04	
Beryllium	0.396	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	14.9	0.260	1.04	
Cobalt	10.5	0.260	1.04	
Copper	14.5	0.521	1.04	
Lead	2.28	0.521	1.04	
Molybdenum	0.401	0.260	1.04	
Nickel	11.1	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	33.8	0.260	1.04	
Zinc	50.8	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

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Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 18 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#853	**14-02-1549-18-A**	**02/21/14 13:45**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:54**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	1.11	0.739	0.985	
Barium	100	0.493	0.985	
Beryllium	0.340	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	12.2	0.246	0.985	
Cobalt	8.98	0.246	0.985	
Copper	12.2	0.493	0.985	
Lead	1.42	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	9.18	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	29.4	0.246	0.985	
Zinc	43.9	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18056**	**N/A**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:20**	**140221L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#836	**14-02-1549-1-A**	**02/21/14 08:05**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:13**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0758	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#837	**14-02-1549-2-A**	**02/21/14 08:25**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:15**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.286	0.0769	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#838	**14-02-1549-3-A**	**02/21/14 08:53**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:18**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#839	**14-02-1549-4-A**	**02/21/14 09:00**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:20**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.142	0.0862	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#840	**14-02-1549-5-A**	**02/21/14 09:20**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:22**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0795	0.0735	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#841	**14-02-1549-6-A**	**02/21/14 09:35**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:29**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#842	**14-02-1549-7-A**	**02/21/14 10:00**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:35**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#844	**14-02-1549-8-A**	**02/21/14 10:30**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:37**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#843	**14-02-1549-9-A**	**02/21/14 10:10**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:40**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#845	**14-02-1549-10-A**	**02/21/14 10:50**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:42**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#846	**14-02-1549-11-A**	**02/21/14 11:20**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:44**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#847	**14-02-1549-12-A**	**02/21/14 12:20**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:46**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#848	**14-02-1549-13-A**	**02/21/14 12:05**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:49**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0746	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#849	**14-02-1549-14-A**	**02/21/14 12:30**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:55**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.128	0.0847	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#850	**14-02-1549-15-A**	**02/21/14 13:00**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:58**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#851	**14-02-1549-16-A**	**02/21/14 13:15**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 14:00**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.241	0.0893	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#852	**14-02-1549-17-A**	**02/21/14 13:30**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 14:02**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0735	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#853	**14-02-1549-18-A**	**02/21/14 13:45**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 14:04**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0725	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-44**	**N/A**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:09**	**140222L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#836	**14-02-1549-1-A**	**02/21/14 08:05**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 00:05**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

#837	**14-02-1549-2-A**	**02/21/14 08:25**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 00:24**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#838	**14-02-1549-3-A**	**02/21/14 08:53**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 00:43**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

#839	**14-02-1549-4-A**	**02/21/14 09:00**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 01:02**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#840	**14-02-1549-5-A**	**02/21/14 09:20**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 01:21**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

#841	**14-02-1549-6-A**	**02/21/14 09:35**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 01:40**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#842	**14-02-1549-7-A**	**02/21/14 10:00**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 02:18**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

#844	**14-02-1549-8-A**	**02/21/14 10:30**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 02:38**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#843	**14-02-1549-9-A**	**02/21/14 10:10**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 02:57**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	540	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	250	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	87	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

#845	**14-02-1549-10-A**	**02/21/14 10:50**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 03:16**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	71	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#846	**14-02-1549-11-A**	**02/21/14 11:20**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 03:35**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

#847	**14-02-1549-12-A**	**02/21/14 12:20**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 03:54**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#848	**14-02-1549-13-A**	**02/21/14 12:05**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 04:13**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

#849	**14-02-1549-14-A**	**02/21/14 12:30**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 13:20**	**140221L15**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	643	50-130	1,2,7

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#850	**14-02-1549-15-A**	**02/21/14 13:00**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 04:32**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

#851	**14-02-1549-16-A**	**02/21/14 13:15**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 04:51**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#852	**14-02-1549-17-A**	**02/21/14 13:30**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 05:10**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

#853	**14-02-1549-18-A**	**02/21/14 13:45**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 05:29**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-200**	**N/A**	**Solid**	**GC 31**	**02/21/14**	**02/24/14 22:48**	**140221L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L

Project: Former Pechiney Cast Plate / 0106270030

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
QCTB-022114	**14-02-1549-19-A**	**02/21/14 08:00**	**Aqueous**	**GC/MS CC**	**02/22/14**	**02/22/14 13:03**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	80-120	
Dibromofluoromethane	94	78-126	
1,2-Dichloroethane-d4	104	75-135	
Toluene-d8	104	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L

Project: Former Pechiney Cast Plate / 0106270030

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-13269**	**N/A**	**Aqueous**	**GC/MS CC**	**02/22/14**	**02/22/14 12:36**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	80-120	
Dibromofluoromethane	92	78-126	
1,2-Dichloroethane-d4	101	75-135	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#836	**14-02-1549-1-D**	**02/21/14 08:05**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 12:20**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	56	1.00	
Benzene	1.7	1.1	1.00	
Bromobenzene	ND	1.1	1.00	
Bromochloromethane	ND	2.2	1.00	
Bromodichloromethane	ND	1.1	1.00	
Bromoform	ND	5.6	1.00	
Bromomethane	ND	22	1.00	
2-Butanone	ND	22	1.00	
n-Butylbenzene	ND	1.1	1.00	
sec-Butylbenzene	ND	1.1	1.00	
tert-Butylbenzene	ND	1.1	1.00	
Carbon Disulfide	ND	11	1.00	
Carbon Tetrachloride	ND	1.1	1.00	
Chlorobenzene	ND	1.1	1.00	
Chloroethane	ND	2.2	1.00	
Chloroform	ND	1.1	1.00	
Chloromethane	ND	22	1.00	
2-Chlorotoluene	ND	1.1	1.00	
4-Chlorotoluene	ND	1.1	1.00	
Dibromochloromethane	ND	2.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.6	1.00	
1,2-Dibromoethane	ND	1.1	1.00	
Dibromomethane	ND	1.1	1.00	
1,2-Dichlorobenzene	ND	1.1	1.00	
1,3-Dichlorobenzene	ND	1.1	1.00	
1,4-Dichlorobenzene	ND	1.1	1.00	
Dichlorodifluoromethane	ND	2.2	1.00	
1,1-Dichloroethane	ND	1.1	1.00	
1,2-Dichloroethane	ND	1.1	1.00	
1,1-Dichloroethene	ND	1.1	1.00	
c-1,2-Dichloroethene	ND	1.1	1.00	
t-1,2-Dichloroethene	ND	1.1	1.00	
1,2-Dichloropropane	ND	1.1	1.00	
1,3-Dichloropropane	ND	1.1	1.00	
2,2-Dichloropropane	ND	5.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 2 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.2	1.00	
c-1,3-Dichloropropene	ND	1.1	1.00	
t-1,3-Dichloropropene	ND	2.2	1.00	
Ethylbenzene	ND	1.1	1.00	
2-Hexanone	ND	22	1.00	
Isopropylbenzene	ND	1.1	1.00	
p-Isopropyltoluene	ND	1.1	1.00	
Methylene Chloride	ND	11	1.00	
4-Methyl-2-Pentanone	ND	22	1.00	
Naphthalene	ND	11	1.00	
n-Propylbenzene	ND	2.2	1.00	
Styrene	ND	1.1	1.00	
1,1,1,2-Tetrachloroethane	ND	1.1	1.00	
1,1,2,2-Tetrachloroethane	ND	2.2	1.00	
Tetrachloroethene	ND	1.1	1.00	
Toluene	ND	1.1	1.00	
1,2,3-Trichlorobenzene	ND	2.2	1.00	
1,2,4-Trichlorobenzene	ND	2.2	1.00	
1,1,1-Trichloroethane	ND	1.1	1.00	
1,1,2-Trichloroethane	ND	1.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
Trichloroethene	ND	2.2	1.00	
Trichlorofluoromethane	ND	11	1.00	
1,2,3-Trichloropropane	ND	2.2	1.00	
1,2,4-Trimethylbenzene	ND	2.2	1.00	
1,3,5-Trimethylbenzene	ND	2.2	1.00	
Vinyl Acetate	ND	11	1.00	
Vinyl Chloride	ND	1.1	1.00	
p/m-Xylene	ND	2.2	1.00	
o-Xylene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	80-120	
Dibromofluoromethane	100	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#837	**14-02-1549-2-D**	**02/21/14 08:25**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 12:47**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	48	1.00	
Benzene	2.2	0.95	1.00	
Bromobenzene	ND	0.95	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.95	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.95	1.00	
sec-Butylbenzene	ND	0.95	1.00	
tert-Butylbenzene	ND	0.95	1.00	
Carbon Disulfide	ND	9.5	1.00	
Carbon Tetrachloride	ND	0.95	1.00	
Chlorobenzene	ND	0.95	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.95	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.95	1.00	
4-Chlorotoluene	ND	0.95	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.8	1.00	
1,2-Dibromoethane	ND	0.95	1.00	
Dibromomethane	ND	0.95	1.00	
1,2-Dichlorobenzene	ND	0.95	1.00	
1,3-Dichlorobenzene	ND	0.95	1.00	
1,4-Dichlorobenzene	ND	0.95	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.95	1.00	
1,2-Dichloroethane	ND	0.95	1.00	
1,1-Dichloroethene	ND	0.95	1.00	
c-1,2-Dichloroethene	ND	0.95	1.00	
t-1,2-Dichloroethene	ND	0.95	1.00	
1,2-Dichloropropane	ND	0.95	1.00	
1,3-Dichloropropane	ND	0.95	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 4 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.95	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	ND	0.95	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.95	1.00	
p-Isopropyltoluene	ND	0.95	1.00	
Methylene Chloride	ND	9.5	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.5	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.95	1.00	
1,1,1,2-Tetrachloroethane	ND	0.95	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.95	1.00	
Toluene	ND	0.95	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.95	1.00	
1,1,2-Trichloroethane	ND	0.95	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.5	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.5	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.5	1.00	
Vinyl Chloride	ND	0.95	1.00	
p/m-Xylene	ND	1.9	1.00	
o-Xylene	ND	0.95	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	80-120	
Dibromofluoromethane	104	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#838	**14-02-1549-3-D**	**02/21/14 08:53**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 13:15**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	49	1.00	
Benzene	1.9	0.97	1.00	
Bromobenzene	ND	0.97	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.97	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.97	1.00	
sec-Butylbenzene	ND	0.97	1.00	
tert-Butylbenzene	ND	0.97	1.00	
Carbon Disulfide	ND	9.7	1.00	
Carbon Tetrachloride	ND	0.97	1.00	
Chlorobenzene	ND	0.97	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.97	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.97	1.00	
4-Chlorotoluene	ND	0.97	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.9	1.00	
1,2-Dibromoethane	ND	0.97	1.00	
Dibromomethane	ND	0.97	1.00	
1,2-Dichlorobenzene	ND	0.97	1.00	
1,3-Dichlorobenzene	ND	0.97	1.00	
1,4-Dichlorobenzene	ND	0.97	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.97	1.00	
1,2-Dichloroethane	ND	0.97	1.00	
1,1-Dichloroethene	ND	0.97	1.00	
c-1,2-Dichloroethene	ND	0.97	1.00	
t-1,2-Dichloroethene	ND	0.97	1.00	
1,2-Dichloropropane	ND	0.97	1.00	
1,3-Dichloropropane	ND	0.97	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 6 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.97	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	ND	0.97	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.97	1.00	
p-Isopropyltoluene	ND	0.97	1.00	
Methylene Chloride	ND	9.7	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.7	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.97	1.00	
1,1,1,2-Tetrachloroethane	ND	0.97	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.97	1.00	
Toluene	ND	0.97	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.97	1.00	
1,1,2-Trichloroethane	ND	0.97	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.7	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.7	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.7	1.00	
Vinyl Chloride	ND	0.97	1.00	
p/m-Xylene	ND	1.9	1.00	
o-Xylene	ND	0.97	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	80-120	
Dibromofluoromethane	103	79-133	
1,2-Dichloroethane-d4	109	71-155	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#839	**14-02-1549-4-D**	**02/21/14 09:00**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 13:41**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	46	1.00	
Benzene	1.9	0.93	1.00	
Bromobenzene	ND	0.93	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.93	1.00	
Bromoform	ND	4.6	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.93	1.00	
sec-Butylbenzene	ND	0.93	1.00	
tert-Butylbenzene	ND	0.93	1.00	
Carbon Disulfide	ND	9.3	1.00	
Carbon Tetrachloride	ND	0.93	1.00	
Chlorobenzene	ND	0.93	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.93	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.93	1.00	
4-Chlorotoluene	ND	0.93	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.6	1.00	
1,2-Dibromoethane	ND	0.93	1.00	
Dibromomethane	ND	0.93	1.00	
1,2-Dichlorobenzene	ND	0.93	1.00	
1,3-Dichlorobenzene	ND	0.93	1.00	
1,4-Dichlorobenzene	ND	0.93	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.93	1.00	
1,2-Dichloroethane	ND	0.93	1.00	
1,1-Dichloroethene	ND	0.93	1.00	
c-1,2-Dichloroethene	ND	0.93	1.00	
t-1,2-Dichloroethene	ND	0.93	1.00	
1,2-Dichloropropane	ND	0.93	1.00	
1,3-Dichloropropane	ND	0.93	1.00	
2,2-Dichloropropane	ND	4.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 8 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.93	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	ND	0.93	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.93	1.00	
p-Isopropyltoluene	ND	0.93	1.00	
Methylene Chloride	ND	9.3	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.3	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.93	1.00	
1,1,1,2-Tetrachloroethane	ND	0.93	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.93	1.00	
Toluene	ND	0.93	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.93	1.00	
1,1,2-Trichloroethane	ND	0.93	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.3	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.3	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.3	1.00	
Vinyl Chloride	ND	0.93	1.00	
p/m-Xylene	ND	1.9	1.00	
o-Xylene	ND	0.93	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	100	79-133	
1,2-Dichloroethane-d4	111	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#840	**14-02-1549-5-D**	**02/21/14 09:20**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 14:08**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	51	1.00	
Benzene	2.3	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	1.0	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.1	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	1.0	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 10 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	1.0	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	80-120	
Dibromofluoromethane	101	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#841	**14-02-1549-6-D**	**02/21/14 09:35**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 14:35**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	47	1.00	
Benzene	1.7	0.94	1.00	
Bromobenzene	ND	0.94	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.94	1.00	
Bromoform	ND	4.7	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.94	1.00	
sec-Butylbenzene	ND	0.94	1.00	
tert-Butylbenzene	ND	0.94	1.00	
Carbon Disulfide	ND	9.4	1.00	
Carbon Tetrachloride	ND	0.94	1.00	
Chlorobenzene	ND	0.94	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.94	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.94	1.00	
4-Chlorotoluene	ND	0.94	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.7	1.00	
1,2-Dibromoethane	ND	0.94	1.00	
Dibromomethane	ND	0.94	1.00	
1,2-Dichlorobenzene	ND	0.94	1.00	
1,3-Dichlorobenzene	ND	0.94	1.00	
1,4-Dichlorobenzene	ND	0.94	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.94	1.00	
1,2-Dichloroethane	ND	0.94	1.00	
1,1-Dichloroethene	ND	0.94	1.00	
c-1,2-Dichloroethene	ND	0.94	1.00	
t-1,2-Dichloroethene	ND	0.94	1.00	
1,2-Dichloropropane	ND	0.94	1.00	
1,3-Dichloropropane	ND	0.94	1.00	
2,2-Dichloropropane	ND	4.7	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 12 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.94	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	ND	0.94	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.94	1.00	
p-Isopropyltoluene	ND	0.94	1.00	
Methylene Chloride	ND	9.4	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.4	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.94	1.00	
1,1,1,2-Tetrachloroethane	ND	0.94	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.94	1.00	
Toluene	ND	0.94	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.94	1.00	
1,1,2-Trichloroethane	ND	0.94	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.4	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.4	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.4	1.00	
Vinyl Chloride	ND	0.94	1.00	
p/m-Xylene	ND	1.9	1.00	
o-Xylene	ND	0.94	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	104	79-133	
1,2-Dichloroethane-d4	113	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#842	**14-02-1549-7-D**	**02/21/14 10:00**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 15:02**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	54	1.00	
Benzene	ND	1.1	1.00	
Bromobenzene	ND	1.1	1.00	
Bromochloromethane	ND	2.1	1.00	
Bromodichloromethane	ND	1.1	1.00	
Bromoform	ND	5.4	1.00	
Bromomethane	ND	21	1.00	
2-Butanone	ND	21	1.00	
n-Butylbenzene	ND	1.1	1.00	
sec-Butylbenzene	ND	1.1	1.00	
tert-Butylbenzene	ND	1.1	1.00	
Carbon Disulfide	ND	11	1.00	
Carbon Tetrachloride	ND	1.1	1.00	
Chlorobenzene	ND	1.1	1.00	
Chloroethane	ND	2.1	1.00	
Chloroform	ND	1.1	1.00	
Chloromethane	ND	21	1.00	
2-Chlorotoluene	ND	1.1	1.00	
4-Chlorotoluene	ND	1.1	1.00	
Dibromochloromethane	ND	2.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.4	1.00	
1,2-Dibromoethane	ND	1.1	1.00	
Dibromomethane	ND	1.1	1.00	
1,2-Dichlorobenzene	ND	1.1	1.00	
1,3-Dichlorobenzene	ND	1.1	1.00	
1,4-Dichlorobenzene	ND	1.1	1.00	
Dichlorodifluoromethane	ND	2.1	1.00	
1,1-Dichloroethane	ND	1.1	1.00	
1,2-Dichloroethane	ND	1.1	1.00	
1,1-Dichloroethene	ND	1.1	1.00	
c-1,2-Dichloroethene	ND	1.1	1.00	
t-1,2-Dichloroethene	ND	1.1	1.00	
1,2-Dichloropropane	ND	1.1	1.00	
1,3-Dichloropropane	ND	1.1	1.00	
2,2-Dichloropropane	ND	5.4	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 14 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.1	1.00	
c-1,3-Dichloropropene	ND	1.1	1.00	
t-1,3-Dichloropropene	ND	2.1	1.00	
Ethylbenzene	ND	1.1	1.00	
2-Hexanone	ND	21	1.00	
Isopropylbenzene	ND	1.1	1.00	
p-Isopropyltoluene	ND	1.1	1.00	
Methylene Chloride	ND	11	1.00	
4-Methyl-2-Pentanone	ND	21	1.00	
Naphthalene	ND	11	1.00	
n-Propylbenzene	ND	2.1	1.00	
Styrene	ND	1.1	1.00	
1,1,1,2-Tetrachloroethane	ND	1.1	1.00	
1,1,2,2-Tetrachloroethane	ND	2.1	1.00	
Tetrachloroethene	ND	1.1	1.00	
Toluene	ND	1.1	1.00	
1,2,3-Trichlorobenzene	ND	2.1	1.00	
1,2,4-Trichlorobenzene	ND	2.1	1.00	
1,1,1-Trichloroethane	ND	1.1	1.00	
1,1,2-Trichloroethane	ND	1.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
Trichloroethene	ND	2.1	1.00	
Trichlorofluoromethane	ND	11	1.00	
1,2,3-Trichloropropane	ND	2.1	1.00	
1,2,4-Trimethylbenzene	ND	2.1	1.00	
1,3,5-Trimethylbenzene	ND	2.1	1.00	
Vinyl Acetate	ND	11	1.00	
Vinyl Chloride	ND	1.1	1.00	
p/m-Xylene	ND	2.1	1.00	
o-Xylene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	102	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#844	**14-02-1549-8-D**	**02/21/14 10:30**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 15:30**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	49	1.00	
Benzene	2.1	0.98	1.00	
Bromobenzene	ND	0.98	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	0.98	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	0.98	1.00	
sec-Butylbenzene	ND	0.98	1.00	
tert-Butylbenzene	ND	0.98	1.00	
Carbon Disulfide	ND	9.8	1.00	
Carbon Tetrachloride	ND	0.98	1.00	
Chlorobenzene	ND	0.98	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	0.98	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	0.98	1.00	
4-Chlorotoluene	ND	0.98	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.9	1.00	
1,2-Dibromoethane	ND	0.98	1.00	
Dibromomethane	ND	0.98	1.00	
1,2-Dichlorobenzene	ND	0.98	1.00	
1,3-Dichlorobenzene	ND	0.98	1.00	
1,4-Dichlorobenzene	ND	0.98	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	0.98	1.00	
1,2-Dichloroethane	ND	0.98	1.00	
1,1-Dichloroethene	ND	0.98	1.00	
c-1,2-Dichloroethene	ND	0.98	1.00	
t-1,2-Dichloroethene	ND	0.98	1.00	
1,2-Dichloropropane	ND	0.98	1.00	
1,3-Dichloropropane	ND	0.98	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 16 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	0.98	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	0.98	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	0.98	1.00	
p-Isopropyltoluene	ND	0.98	1.00	
Methylene Chloride	ND	9.8	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	9.8	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	0.98	1.00	
1,1,1,2-Tetrachloroethane	ND	0.98	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	0.98	1.00	
Toluene	ND	0.98	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	0.98	1.00	
1,1,2-Trichloroethane	ND	0.98	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.8	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	9.8	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	9.8	1.00	
Vinyl Chloride	ND	0.98	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	0.98	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	103	79-133	
1,2-Dichloroethane-d4	111	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#843	**14-02-1549-9-D**	**02/21/14 10:10**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 15:58**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	130	49	1.00	
Benzene	2.0	0.99	1.00	
Bromobenzene	ND	0.99	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	0.99	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	25	20	1.00	
n-Butylbenzene	ND	0.99	1.00	
sec-Butylbenzene	ND	0.99	1.00	
tert-Butylbenzene	ND	0.99	1.00	
Carbon Disulfide	ND	9.9	1.00	
Carbon Tetrachloride	ND	0.99	1.00	
Chlorobenzene	ND	0.99	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	0.99	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	0.99	1.00	
4-Chlorotoluene	ND	0.99	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.9	1.00	
1,2-Dibromoethane	ND	0.99	1.00	
Dibromomethane	ND	0.99	1.00	
1,2-Dichlorobenzene	ND	0.99	1.00	
1,3-Dichlorobenzene	ND	0.99	1.00	
1,4-Dichlorobenzene	ND	0.99	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	0.99	1.00	
1,2-Dichloroethane	ND	0.99	1.00	
1,1-Dichloroethene	ND	0.99	1.00	
c-1,2-Dichloroethene	ND	0.99	1.00	
t-1,2-Dichloroethene	ND	0.99	1.00	
1,2-Dichloropropane	ND	0.99	1.00	
1,3-Dichloropropane	ND	0.99	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 18 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	0.99	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	0.99	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	0.99	1.00	
p-Isopropyltoluene	ND	0.99	1.00	
Methylene Chloride	ND	9.9	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	9.9	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	0.99	1.00	
1,1,1,2-Tetrachloroethane	ND	0.99	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	0.99	1.00	
Toluene	1.0	0.99	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	0.99	1.00	
1,1,2-Trichloroethane	ND	0.99	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.9	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	9.9	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	9.9	1.00	
Vinyl Chloride	ND	0.99	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	0.99	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	104	79-133	
1,2-Dichloroethane-d4	111	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#845	**14-02-1549-10-D**	**02/21/14 10:50**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 16:25**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.00	
Benzene	1.3	0.99	1.00	
Bromobenzene	ND	0.99	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	0.99	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	0.99	1.00	
sec-Butylbenzene	ND	0.99	1.00	
tert-Butylbenzene	ND	0.99	1.00	
Carbon Disulfide	ND	9.9	1.00	
Carbon Tetrachloride	ND	0.99	1.00	
Chlorobenzene	ND	0.99	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	0.99	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	0.99	1.00	
4-Chlorotoluene	ND	0.99	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.99	1.00	
Dibromomethane	ND	0.99	1.00	
1,2-Dichlorobenzene	ND	0.99	1.00	
1,3-Dichlorobenzene	ND	0.99	1.00	
1,4-Dichlorobenzene	ND	0.99	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	0.99	1.00	
1,2-Dichloroethane	ND	0.99	1.00	
1,1-Dichloroethene	ND	0.99	1.00	
c-1,2-Dichloroethene	ND	0.99	1.00	
t-1,2-Dichloroethene	ND	0.99	1.00	
1,2-Dichloropropane	ND	0.99	1.00	
1,3-Dichloropropane	ND	0.99	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 20 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	0.99	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	0.99	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	0.99	1.00	
p-Isopropyltoluene	ND	0.99	1.00	
Methylene Chloride	ND	9.9	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	9.9	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	0.99	1.00	
1,1,1,2-Tetrachloroethane	ND	0.99	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	0.99	1.00	
Toluene	ND	0.99	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	0.99	1.00	
1,1,2-Trichloroethane	ND	0.99	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.9	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	9.9	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	9.9	1.00	
Vinyl Chloride	ND	0.99	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	0.99	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	112	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 21 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#846	**14-02-1549-11-D**	**02/21/14 11:20**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 16:52**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	49	1.00	
Benzene	5.1	0.98	1.00	
Bromobenzene	ND	0.98	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	0.98	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	0.98	1.00	
sec-Butylbenzene	ND	0.98	1.00	
tert-Butylbenzene	ND	0.98	1.00	
Carbon Disulfide	ND	9.8	1.00	
Carbon Tetrachloride	ND	0.98	1.00	
Chlorobenzene	ND	0.98	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	0.98	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	0.98	1.00	
4-Chlorotoluene	ND	0.98	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.9	1.00	
1,2-Dibromoethane	ND	0.98	1.00	
Dibromomethane	ND	0.98	1.00	
1,2-Dichlorobenzene	ND	0.98	1.00	
1,3-Dichlorobenzene	ND	0.98	1.00	
1,4-Dichlorobenzene	ND	0.98	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	0.98	1.00	
1,2-Dichloroethane	ND	0.98	1.00	
1,1-Dichloroethene	ND	0.98	1.00	
c-1,2-Dichloroethene	ND	0.98	1.00	
t-1,2-Dichloroethene	ND	0.98	1.00	
1,2-Dichloropropane	ND	0.98	1.00	
1,3-Dichloropropane	ND	0.98	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 22 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	0.98	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	0.98	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	0.98	1.00	
p-Isopropyltoluene	ND	0.98	1.00	
Methylene Chloride	ND	9.8	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	9.8	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	0.98	1.00	
1,1,1,2-Tetrachloroethane	ND	0.98	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	0.98	1.00	
Toluene	1.4	0.98	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	0.98	1.00	
1,1,2-Trichloroethane	ND	0.98	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.8	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	9.8	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	9.8	1.00	
Vinyl Chloride	ND	0.98	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	0.98	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	104	79-133	
1,2-Dichloroethane-d4	113	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 23 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#847	**14-02-1549-12-D**	**02/21/14 12:20**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 17:19**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	47	1.00	
Benzene	35	0.94	1.00	
Bromobenzene	ND	0.94	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.94	1.00	
Bromoform	ND	4.7	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.94	1.00	
sec-Butylbenzene	ND	0.94	1.00	
tert-Butylbenzene	ND	0.94	1.00	
Carbon Disulfide	ND	9.4	1.00	
Carbon Tetrachloride	ND	0.94	1.00	
Chlorobenzene	ND	0.94	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.94	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.94	1.00	
4-Chlorotoluene	ND	0.94	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.7	1.00	
1,2-Dibromoethane	ND	0.94	1.00	
Dibromomethane	ND	0.94	1.00	
1,2-Dichlorobenzene	ND	0.94	1.00	
1,3-Dichlorobenzene	ND	0.94	1.00	
1,4-Dichlorobenzene	ND	0.94	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.94	1.00	
1,2-Dichloroethane	ND	0.94	1.00	
1,1-Dichloroethene	ND	0.94	1.00	
c-1,2-Dichloroethene	ND	0.94	1.00	
t-1,2-Dichloroethene	ND	0.94	1.00	
1,2-Dichloropropane	ND	0.94	1.00	
1,3-Dichloropropane	ND	0.94	1.00	
2,2-Dichloropropane	ND	4.7	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 24 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.94	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	6.4	0.94	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.94	1.00	
p-Isopropyltoluene	ND	0.94	1.00	
Methylene Chloride	ND	9.4	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.4	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.94	1.00	
1,1,1,2-Tetrachloroethane	ND	0.94	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.94	1.00	
Toluene	36	0.94	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.94	1.00	
1,1,2-Trichloroethane	ND	0.94	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.4	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.4	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.4	1.00	
Vinyl Chloride	ND	0.94	1.00	
p/m-Xylene	8.6	1.9	1.00	
o-Xylene	3.1	0.94	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	80-120	
Dibromofluoromethane	99	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 25 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#848	**14-02-1549-13-D**	**02/21/14 12:05**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 17:47**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	46	1.00	
Benzene	2.6	0.91	1.00	
Bromobenzene	ND	0.91	1.00	
Bromochloromethane	ND	1.8	1.00	
Bromodichloromethane	ND	0.91	1.00	
Bromoform	ND	4.6	1.00	
Bromomethane	ND	18	1.00	
2-Butanone	ND	18	1.00	
n-Butylbenzene	ND	0.91	1.00	
sec-Butylbenzene	ND	0.91	1.00	
tert-Butylbenzene	ND	0.91	1.00	
Carbon Disulfide	ND	9.1	1.00	
Carbon Tetrachloride	ND	0.91	1.00	
Chlorobenzene	ND	0.91	1.00	
Chloroethane	ND	1.8	1.00	
Chloroform	ND	0.91	1.00	
Chloromethane	ND	18	1.00	
2-Chlorotoluene	ND	0.91	1.00	
4-Chlorotoluene	ND	0.91	1.00	
Dibromochloromethane	ND	1.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.6	1.00	
1,2-Dibromoethane	ND	0.91	1.00	
Dibromomethane	ND	0.91	1.00	
1,2-Dichlorobenzene	ND	0.91	1.00	
1,3-Dichlorobenzene	ND	0.91	1.00	
1,4-Dichlorobenzene	ND	0.91	1.00	
Dichlorodifluoromethane	ND	1.8	1.00	
1,1-Dichloroethane	ND	0.91	1.00	
1,2-Dichloroethane	ND	0.91	1.00	
1,1-Dichloroethene	ND	0.91	1.00	
c-1,2-Dichloroethene	ND	0.91	1.00	
t-1,2-Dichloroethene	ND	0.91	1.00	
1,2-Dichloropropane	ND	0.91	1.00	
1,3-Dichloropropane	ND	0.91	1.00	
2,2-Dichloropropane	ND	4.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 26 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.8	1.00	
c-1,3-Dichloropropene	ND	0.91	1.00	
t-1,3-Dichloropropene	ND	1.8	1.00	
Ethylbenzene	ND	0.91	1.00	
2-Hexanone	ND	18	1.00	
Isopropylbenzene	ND	0.91	1.00	
p-Isopropyltoluene	ND	0.91	1.00	
Methylene Chloride	ND	9.1	1.00	
4-Methyl-2-Pentanone	ND	18	1.00	
Naphthalene	ND	9.1	1.00	
n-Propylbenzene	ND	1.8	1.00	
Styrene	ND	0.91	1.00	
1,1,1,2-Tetrachloroethane	ND	0.91	1.00	
1,1,2,2-Tetrachloroethane	ND	1.8	1.00	
Tetrachloroethene	ND	0.91	1.00	
Toluene	1.1	0.91	1.00	
1,2,3-Trichlorobenzene	ND	1.8	1.00	
1,2,4-Trichlorobenzene	ND	1.8	1.00	
1,1,1-Trichloroethane	ND	0.91	1.00	
1,1,2-Trichloroethane	ND	0.91	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.1	1.00	
Trichloroethene	ND	1.8	1.00	
Trichlorofluoromethane	ND	9.1	1.00	
1,2,3-Trichloropropane	ND	1.8	1.00	
1,2,4-Trimethylbenzene	ND	1.8	1.00	
1,3,5-Trimethylbenzene	ND	1.8	1.00	
Vinyl Acetate	ND	9.1	1.00	
Vinyl Chloride	ND	0.91	1.00	
p/m-Xylene	ND	1.8	1.00	
o-Xylene	ND	0.91	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	80-120	
Dibromofluoromethane	101	79-133	
1,2-Dichloroethane-d4	109	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 27 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#849	**14-02-1549-14-D**	**02/21/14 12:30**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 18:13**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	160	44	1.00	
Benzene	ND	0.89	1.00	
Bromobenzene	ND	0.89	1.00	
Bromochloromethane	ND	1.8	1.00	
Bromodichloromethane	ND	0.89	1.00	
Bromoform	ND	4.4	1.00	
Bromomethane	ND	18	1.00	
2-Butanone	ND	18	1.00	
n-Butylbenzene	ND	0.89	1.00	
sec-Butylbenzene	ND	0.89	1.00	
tert-Butylbenzene	ND	0.89	1.00	
Carbon Disulfide	ND	8.9	1.00	
Carbon Tetrachloride	ND	0.89	1.00	
Chlorobenzene	ND	0.89	1.00	
Chloroethane	ND	1.8	1.00	
Chloroform	ND	0.89	1.00	
Chloromethane	ND	18	1.00	
2-Chlorotoluene	ND	0.89	1.00	
4-Chlorotoluene	ND	0.89	1.00	
Dibromochloromethane	ND	1.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.4	1.00	
1,2-Dibromoethane	ND	0.89	1.00	
Dibromomethane	ND	0.89	1.00	
1,2-Dichlorobenzene	ND	0.89	1.00	
1,3-Dichlorobenzene	ND	0.89	1.00	
1,4-Dichlorobenzene	ND	0.89	1.00	
Dichlorodifluoromethane	ND	1.8	1.00	
1,1-Dichloroethane	ND	0.89	1.00	
1,2-Dichloroethane	ND	0.89	1.00	
1,1-Dichloroethene	ND	0.89	1.00	
c-1,2-Dichloroethene	ND	0.89	1.00	
t-1,2-Dichloroethene	ND	0.89	1.00	
1,2-Dichloropropane	ND	0.89	1.00	
1,3-Dichloropropane	ND	0.89	1.00	
2,2-Dichloropropane	ND	4.4	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 28 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.8	1.00	
c-1,3-Dichloropropene	ND	0.89	1.00	
t-1,3-Dichloropropene	ND	1.8	1.00	
Ethylbenzene	ND	0.89	1.00	
2-Hexanone	ND	18	1.00	
Isopropylbenzene	ND	0.89	1.00	
p-Isopropyltoluene	ND	0.89	1.00	
Methylene Chloride	ND	8.9	1.00	
4-Methyl-2-Pentanone	ND	18	1.00	
Naphthalene	ND	8.9	1.00	
n-Propylbenzene	ND	1.8	1.00	
Styrene	ND	0.89	1.00	
1,1,1,2-Tetrachloroethane	ND	0.89	1.00	
1,1,2,2-Tetrachloroethane	ND	1.8	1.00	
Tetrachloroethene	ND	0.89	1.00	
Toluene	ND	0.89	1.00	
1,2,3-Trichlorobenzene	ND	1.8	1.00	
1,2,4-Trichlorobenzene	ND	1.8	1.00	
1,1,1-Trichloroethane	ND	0.89	1.00	
1,1,2-Trichloroethane	ND	0.89	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.9	1.00	
Trichloroethene	ND	1.8	1.00	
Trichlorofluoromethane	ND	8.9	1.00	
1,2,3-Trichloropropane	ND	1.8	1.00	
1,2,4-Trimethylbenzene	ND	1.8	1.00	
1,3,5-Trimethylbenzene	ND	1.8	1.00	
Vinyl Acetate	ND	8.9	1.00	
Vinyl Chloride	ND	0.89	1.00	
p/m-Xylene	ND	1.8	1.00	
o-Xylene	ND	0.89	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	91	80-120	
Dibromofluoromethane	112	79-133	
1,2-Dichloroethane-d4	118	71-155	
Toluene-d8	95	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 29 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#850	**14-02-1549-15-D**	**02/21/14 13:00**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 18:40**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	45	1.00	
Benzene	1.3	0.90	1.00	
Bromobenzene	ND	0.90	1.00	
Bromochloromethane	ND	1.8	1.00	
Bromodichloromethane	ND	0.90	1.00	
Bromoform	ND	4.5	1.00	
Bromomethane	ND	18	1.00	
2-Butanone	ND	18	1.00	
n-Butylbenzene	ND	0.90	1.00	
sec-Butylbenzene	ND	0.90	1.00	
tert-Butylbenzene	ND	0.90	1.00	
Carbon Disulfide	ND	9.0	1.00	
Carbon Tetrachloride	ND	0.90	1.00	
Chlorobenzene	ND	0.90	1.00	
Chloroethane	ND	1.8	1.00	
Chloroform	ND	0.90	1.00	
Chloromethane	ND	18	1.00	
2-Chlorotoluene	ND	0.90	1.00	
4-Chlorotoluene	ND	0.90	1.00	
Dibromochloromethane	ND	1.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.5	1.00	
1,2-Dibromoethane	ND	0.90	1.00	
Dibromomethane	ND	0.90	1.00	
1,2-Dichlorobenzene	ND	0.90	1.00	
1,3-Dichlorobenzene	ND	0.90	1.00	
1,4-Dichlorobenzene	ND	0.90	1.00	
Dichlorodifluoromethane	ND	1.8	1.00	
1,1-Dichloroethane	ND	0.90	1.00	
1,2-Dichloroethane	ND	0.90	1.00	
1,1-Dichloroethene	ND	0.90	1.00	
c-1,2-Dichloroethene	ND	0.90	1.00	
t-1,2-Dichloroethene	ND	0.90	1.00	
1,2-Dichloropropane	ND	0.90	1.00	
1,3-Dichloropropane	ND	0.90	1.00	
2,2-Dichloropropane	ND	4.5	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 30 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.8	1.00	
c-1,3-Dichloropropene	ND	0.90	1.00	
t-1,3-Dichloropropene	ND	1.8	1.00	
Ethylbenzene	ND	0.90	1.00	
2-Hexanone	ND	18	1.00	
Isopropylbenzene	ND	0.90	1.00	
p-Isopropyltoluene	ND	0.90	1.00	
Methylene Chloride	ND	9.0	1.00	
4-Methyl-2-Pentanone	ND	18	1.00	
Naphthalene	ND	9.0	1.00	
n-Propylbenzene	ND	1.8	1.00	
Styrene	ND	0.90	1.00	
1,1,1,2-Tetrachloroethane	ND	0.90	1.00	
1,1,2,2-Tetrachloroethane	ND	1.8	1.00	
Tetrachloroethene	ND	0.90	1.00	
Toluene	1.1	0.90	1.00	
1,2,3-Trichlorobenzene	ND	1.8	1.00	
1,2,4-Trichlorobenzene	ND	1.8	1.00	
1,1,1-Trichloroethane	ND	0.90	1.00	
1,1,2-Trichloroethane	ND	0.90	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.0	1.00	
Trichloroethene	ND	1.8	1.00	
Trichlorofluoromethane	ND	9.0	1.00	
1,2,3-Trichloropropane	ND	1.8	1.00	
1,2,4-Trimethylbenzene	ND	1.8	1.00	
1,3,5-Trimethylbenzene	ND	1.8	1.00	
Vinyl Acetate	ND	9.0	1.00	
Vinyl Chloride	ND	0.90	1.00	
p/m-Xylene	ND	1.8	1.00	
o-Xylene	ND	0.90	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 31 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#851	**14-02-1549-16-D**	**02/21/14 13:15**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 19:08**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	44	1.00	
Benzene	2.2	0.88	1.00	
Bromobenzene	ND	0.88	1.00	
Bromochloromethane	ND	1.8	1.00	
Bromodichloromethane	ND	0.88	1.00	
Bromoform	ND	4.4	1.00	
Bromomethane	ND	18	1.00	
2-Butanone	ND	18	1.00	
n-Butylbenzene	ND	0.88	1.00	
sec-Butylbenzene	ND	0.88	1.00	
tert-Butylbenzene	ND	0.88	1.00	
Carbon Disulfide	ND	8.8	1.00	
Carbon Tetrachloride	ND	0.88	1.00	
Chlorobenzene	ND	0.88	1.00	
Chloroethane	ND	1.8	1.00	
Chloroform	ND	0.88	1.00	
Chloromethane	ND	18	1.00	
2-Chlorotoluene	ND	0.88	1.00	
4-Chlorotoluene	ND	0.88	1.00	
Dibromochloromethane	ND	1.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.4	1.00	
1,2-Dibromoethane	ND	0.88	1.00	
Dibromomethane	ND	0.88	1.00	
1,2-Dichlorobenzene	ND	0.88	1.00	
1,3-Dichlorobenzene	ND	0.88	1.00	
1,4-Dichlorobenzene	ND	0.88	1.00	
Dichlorodifluoromethane	ND	1.8	1.00	
1,1-Dichloroethane	ND	0.88	1.00	
1,2-Dichloroethane	ND	0.88	1.00	
1,1-Dichloroethene	ND	0.88	1.00	
c-1,2-Dichloroethene	ND	0.88	1.00	
t-1,2-Dichloroethene	ND	0.88	1.00	
1,2-Dichloropropane	ND	0.88	1.00	
1,3-Dichloropropane	ND	0.88	1.00	
2,2-Dichloropropane	ND	4.4	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 32 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.8	1.00	
c-1,3-Dichloropropene	ND	0.88	1.00	
t-1,3-Dichloropropene	ND	1.8	1.00	
Ethylbenzene	ND	0.88	1.00	
2-Hexanone	ND	18	1.00	
Isopropylbenzene	ND	0.88	1.00	
p-Isopropyltoluene	ND	0.88	1.00	
Methylene Chloride	ND	8.8	1.00	
4-Methyl-2-Pentanone	ND	18	1.00	
Naphthalene	ND	8.8	1.00	
n-Propylbenzene	ND	1.8	1.00	
Styrene	ND	0.88	1.00	
1,1,1,2-Tetrachloroethane	ND	0.88	1.00	
1,1,2,2-Tetrachloroethane	ND	1.8	1.00	
Tetrachloroethene	ND	0.88	1.00	
Toluene	ND	0.88	1.00	
1,2,3-Trichlorobenzene	ND	1.8	1.00	
1,2,4-Trichlorobenzene	ND	1.8	1.00	
1,1,1-Trichloroethane	ND	0.88	1.00	
1,1,2-Trichloroethane	ND	0.88	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.8	1.00	
Trichloroethene	ND	1.8	1.00	
Trichlorofluoromethane	ND	8.8	1.00	
1,2,3-Trichloropropane	ND	1.8	1.00	
1,2,4-Trimethylbenzene	ND	1.8	1.00	
1,3,5-Trimethylbenzene	ND	1.8	1.00	
Vinyl Acetate	ND	8.8	1.00	
Vinyl Chloride	ND	0.88	1.00	
p/m-Xylene	ND	1.8	1.00	
o-Xylene	ND	0.88	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	80-120	
Dibromofluoromethane	102	79-133	
1,2-Dichloroethane-d4	112	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 33 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#852	**14-02-1549-17-D**	**02/21/14 13:30**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 19:35**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	48	1.00	
Benzene	2.4	0.95	1.00	
Bromobenzene	ND	0.95	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.95	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.95	1.00	
sec-Butylbenzene	ND	0.95	1.00	
tert-Butylbenzene	ND	0.95	1.00	
Carbon Disulfide	ND	9.5	1.00	
Carbon Tetrachloride	ND	0.95	1.00	
Chlorobenzene	ND	0.95	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.95	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.95	1.00	
4-Chlorotoluene	ND	0.95	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.8	1.00	
1,2-Dibromoethane	ND	0.95	1.00	
Dibromomethane	ND	0.95	1.00	
1,2-Dichlorobenzene	ND	0.95	1.00	
1,3-Dichlorobenzene	ND	0.95	1.00	
1,4-Dichlorobenzene	ND	0.95	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.95	1.00	
1,2-Dichloroethane	ND	0.95	1.00	
1,1-Dichloroethene	ND	0.95	1.00	
c-1,2-Dichloroethene	ND	0.95	1.00	
t-1,2-Dichloroethene	ND	0.95	1.00	
1,2-Dichloropropane	ND	0.95	1.00	
1,3-Dichloropropane	ND	0.95	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 34 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.95	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	ND	0.95	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.95	1.00	
p-Isopropyltoluene	ND	0.95	1.00	
Methylene Chloride	ND	9.5	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.5	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.95	1.00	
1,1,1,2-Tetrachloroethane	ND	0.95	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.95	1.00	
Toluene	ND	0.95	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.95	1.00	
1,1,2-Trichloroethane	ND	0.95	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.5	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.5	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.5	1.00	
Vinyl Chloride	ND	0.95	1.00	
p/m-Xylene	ND	1.9	1.00	
o-Xylene	ND	0.95	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	80-120	
Dibromofluoromethane	103	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 35 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#853	**14-02-1549-18-D**	**02/21/14 13:45**	**Solid**	**GC/MS Z**	**02/21/14**	**02/22/14 20:02**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	46	1.00	
Benzene	2.0	0.92	1.00	
Bromobenzene	ND	0.92	1.00	
Bromochloromethane	ND	1.8	1.00	
Bromodichloromethane	ND	0.92	1.00	
Bromoform	ND	4.6	1.00	
Bromomethane	ND	18	1.00	
2-Butanone	ND	18	1.00	
n-Butylbenzene	ND	0.92	1.00	
sec-Butylbenzene	ND	0.92	1.00	
tert-Butylbenzene	ND	0.92	1.00	
Carbon Disulfide	ND	9.2	1.00	
Carbon Tetrachloride	ND	0.92	1.00	
Chlorobenzene	ND	0.92	1.00	
Chloroethane	ND	1.8	1.00	
Chloroform	ND	0.92	1.00	
Chloromethane	ND	18	1.00	
2-Chlorotoluene	ND	0.92	1.00	
4-Chlorotoluene	ND	0.92	1.00	
Dibromochloromethane	ND	1.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.6	1.00	
1,2-Dibromoethane	ND	0.92	1.00	
Dibromomethane	ND	0.92	1.00	
1,2-Dichlorobenzene	ND	0.92	1.00	
1,3-Dichlorobenzene	ND	0.92	1.00	
1,4-Dichlorobenzene	ND	0.92	1.00	
Dichlorodifluoromethane	ND	1.8	1.00	
1,1-Dichloroethane	ND	0.92	1.00	
1,2-Dichloroethane	ND	0.92	1.00	
1,1-Dichloroethene	ND	0.92	1.00	
c-1,2-Dichloroethene	ND	0.92	1.00	
t-1,2-Dichloroethene	ND	0.92	1.00	
1,2-Dichloropropane	ND	0.92	1.00	
1,3-Dichloropropane	ND	0.92	1.00	
2,2-Dichloropropane	ND	4.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 36 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.8	1.00	
c-1,3-Dichloropropene	ND	0.92	1.00	
t-1,3-Dichloropropene	ND	1.8	1.00	
Ethylbenzene	ND	0.92	1.00	
2-Hexanone	ND	18	1.00	
Isopropylbenzene	ND	0.92	1.00	
p-Isopropyltoluene	ND	0.92	1.00	
Methylene Chloride	ND	9.2	1.00	
4-Methyl-2-Pentanone	ND	18	1.00	
Naphthalene	ND	9.2	1.00	
n-Propylbenzene	ND	1.8	1.00	
Styrene	ND	0.92	1.00	
1,1,1,2-Tetrachloroethane	ND	0.92	1.00	
1,1,2,2-Tetrachloroethane	ND	1.8	1.00	
Tetrachloroethene	ND	0.92	1.00	
Toluene	0.93	0.92	1.00	
1,2,3-Trichlorobenzene	ND	1.8	1.00	
1,2,4-Trichlorobenzene	ND	1.8	1.00	
1,1,1-Trichloroethane	ND	0.92	1.00	
1,1,2-Trichloroethane	ND	0.92	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.2	1.00	
Trichloroethene	ND	1.8	1.00	
Trichlorofluoromethane	ND	9.2	1.00	
1,2,3-Trichloropropane	ND	1.8	1.00	
1,2,4-Trimethylbenzene	ND	1.8	1.00	
1,3,5-Trimethylbenzene	ND	1.8	1.00	
Vinyl Acetate	ND	9.2	1.00	
Vinyl Chloride	ND	0.92	1.00	
p/m-Xylene	ND	1.8	1.00	
o-Xylene	ND	0.92	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	103	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 37 of 38

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-025-24920**	**N/A**	**Solid**	**GC/MS Z**	**02/22/14**	**02/22/14 11:53**	**140222L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	1.0	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	1.0	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/21/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1549
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 38 of 38

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	1.0	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	80-120	
Dibromofluoromethane	100	79-133	
1,2-Dichloroethane-d4	102	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#842	**Sample**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 17:46**	**140221S24**
#842	**Matrix Spike**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 15:32**	**140221S24**
#842	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 15:49**	**140221S24**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	405.1	101	404.1	101	64-130	0	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#841	**Sample**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:31**	**140221S08**
#841	**Matrix Spike**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:24**	**140221S08**
#841	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:25**	**140221S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	3.234	13	2.793	11	50-115	15	0-20	3
Arsenic	1.119	25.00	27.63	106	25.99	99	75-125	6	0-20	
Barium	131.0	25.00	157.7	4X	159.9	4X	75-125	4X	0-20	Q
Beryllium	0.4616	25.00	27.42	108	26.22	103	75-125	4	0-20	
Cadmium	ND	25.00	25.72	103	24.65	99	75-125	4	0-20	
Chromium	16.43	25.00	43.50	108	41.71	101	75-125	4	0-20	
Cobalt	10.82	25.00	37.83	108	36.69	103	75-125	3	0-20	
Copper	18.58	25.00	45.27	107	44.41	103	75-125	2	0-20	
Lead	2.282	25.00	27.54	101	26.67	98	75-125	3	0-20	
Molybdenum	0.5326	25.00	24.77	97	23.79	93	75-125	4	0-20	
Nickel	12.46	25.00	38.53	104	37.15	99	75-125	4	0-20	
Selenium	ND	25.00	22.91	92	22.29	89	75-125	3	0-20	
Silver	ND	12.50	13.93	111	13.28	106	75-125	5	0-20	
Thallium	ND	25.00	18.66	75	18.15	73	75-125	3	0-20	3
Vanadium	36.73	25.00	65.02	113	62.37	103	75-125	4	0-20	
Zinc	54.41	25.00	79.51	100	77.97	94	75-125	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#841	**Sample**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:29**	**140222S04**
#841	**Matrix Spike**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:31**	**140222S04**
#841	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:33**	**140222S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7946	95	0.8703	104	71-137	9	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#836	**Sample**	**Solid**	**GC 31**	**02/21/14**	**02/25/14 00:05**	**140221S15**
#836	**Matrix Spike**	**Solid**	**GC 31**	**02/21/14**	**02/24/14 23:26**	**140221S15**
#836	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**02/21/14**	**02/24/14 23:46**	**140221S15**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	123.3	123	114.7	115	50-135	7	0-25	
Aroclor-1260	ND	100.0	117.5	117	106.9	107	50-135	9	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1571-2	**Sample**	**Aqueous**	**GC/MS CC**	**02/22/14**	**02/22/14 13:30**	**140222S01**
14-02-1571-2	**Matrix Spike**	**Aqueous**	**GC/MS CC**	**02/22/14**	**02/22/14 13:58**	**140222S01**
14-02-1571-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS CC**	**02/22/14**	**02/22/14 14:25**	**140222S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	8.864	50.00	58.13	99	60.15	103	74-122	3	0-21	
Carbon Tetrachloride	ND	50.00	49.38	99	45.35	91	60-144	9	0-21	
Chlorobenzene	ND	50.00	51.94	104	51.69	103	73-120	0	0-22	
1,2-Dibromoethane	ND	50.00	48.75	98	50.25	100	80-122	3	0-20	
1,2-Dichlorobenzene	ND	50.00	50.80	102	52.33	105	70-120	3	0-26	
1,2-Dichloroethane	ND	50.00	49.45	99	44.36	89	64-142	11	0-20	
1,1-Dichloroethene	ND	50.00	67.27	135	46.96	94	52-136	36	0-21	4
Ethylbenzene	ND	50.00	51.28	103	50.78	102	77-125	1	0-24	
Toluene	13.52	50.00	65.08	103	66.48	106	72-126	2	0-23	
Trichloroethene	ND	50.00	51.65	103	50.67	101	74-128	2	0-22	
Vinyl Chloride	ND	50.00	68.08	136	42.89	86	67-133	45	0-20	3,4
p/m-Xylene	4.600	100.0	109.0	104	107.6	103	63-129	1	0-25	
o-Xylene	1.338	50.00	55.38	108	54.96	107	62-128	1	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	59.37	119	43.17	86	68-134	32	0-21	4

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-783	**LCS**	**Solid**	**GC 47**	**02/21/14**	**02/24/14 15:15**	**140221B24**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	406.7	102	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18056	**LCS**	**Solid**	**ICP 7300**	**02/21/14**	**02/22/14 15:22**	**140221L08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.86	99	80-120	73-127	
Arsenic	25.00	25.17	101	80-120	73-127	
Barium	25.00	26.19	105	80-120	73-127	
Beryllium	25.00	24.96	100	80-120	73-127	
Cadmium	25.00	26.21	105	80-120	73-127	
Chromium	25.00	26.38	106	80-120	73-127	
Cobalt	25.00	28.42	114	80-120	73-127	
Copper	25.00	26.21	105	80-120	73-127	
Lead	25.00	26.66	107	80-120	73-127	
Molybdenum	25.00	25.62	102	80-120	73-127	
Nickel	25.00	27.50	110	80-120	73-127	
Selenium	25.00	23.76	95	80-120	73-127	
Silver	12.50	13.56	108	80-120	73-127	
Thallium	25.00	27.16	109	80-120	73-127	
Vanadium	25.00	25.14	101	80-120	73-127	
Zinc	25.00	25.68	103	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-44	**LCS**	**Solid**	**Mercury**	**02/22/14**	**02/22/14 13:11**	**140222L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8465	101	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-200	**LCS**	**Solid**	**GC 31**	**02/21/14**	**02/24/14 23:07**	**140221L15**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	114.3	114	50-135	
Aroclor-1260	100.0	104.4	104	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-001-13269	**LCS**	**Aqueous**	**GC/MS CC**	**02/22/14**	**02/22/14 11:40**	**140222L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	50.54	101	80-120	73-127	
Carbon Tetrachloride	50.00	52.37	105	67-139	55-151	
Chlorobenzene	50.00	52.04	104	78-120	71-127	
1,2-Dibromoethane	50.00	53.94	108	80-120	73-127	
1,2-Dichlorobenzene	50.00	52.70	105	63-129	52-140	
1,2-Dichloroethane	50.00	54.27	109	70-130	60-140	
1,1-Dichloroethene	50.00	57.25	115	66-126	56-136	
Ethylbenzene	50.00	51.87	104	80-123	73-130	
Toluene	50.00	52.97	106	80-120	73-127	
Trichloroethene	50.00	53.66	107	80-122	73-129	
Vinyl Chloride	50.00	63.52	127	70-130	60-140	
p/m-Xylene	100.0	105.4	105	75-123	67-131	
o-Xylene	50.00	54.22	108	74-122	66-130	
Methyl-t-Butyl Ether (MTBE)	50.00	49.20	98	69-129	59-139	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	02/21/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1549
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-025-24920	**LCS**	**Solid**	**GC/MS Z**	**02/22/14**	**02/22/14 10:04**	**140222L01**
095-01-025-24920	**LCSD**	**Solid**	**GC/MS Z**	**02/22/14**	**02/22/14 10:31**	**140222L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	51.18	102	50.08	100	80-120	73-127	2	0-20	
Carbon Tetrachloride	50.00	64.45	129	61.50	123	65-137	53-149	5	0-20	
Chlorobenzene	50.00	52.29	105	51.18	102	80-120	73-127	2	0-20	
1,2-Dibromoethane	50.00	50.61	101	49.81	100	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	50.00	52.83	106	50.69	101	80-120	73-127	4	0-20	
1,2-Dichloroethane	50.00	55.71	111	54.12	108	80-120	73-127	3	0-20	
1,1-Dichloroethene	50.00	55.47	111	53.37	107	68-128	58-138	4	0-20	
Ethylbenzene	50.00	50.77	102	50.03	100	80-120	73-127	1	0-20	
Toluene	50.00	52.91	106	51.95	104	80-120	73-127	2	0-20	
Trichloroethene	50.00	53.88	108	53.09	106	80-120	73-127	1	0-20	
Vinyl Chloride	50.00	55.55	111	51.91	104	67-127	57-137	7	0-20	
p/m-Xylene	100.0	101.5	102	100.2	100	75-125	67-133	1	0-25	
o-Xylene	50.00	52.42	105	51.79	104	75-125	67-133	1	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	50.48	101	50.25	101	70-124	61-133	0	0-20	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-02-1549

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5035	796	GC/MS Z	2
EPA 8260B	EPA 5030C	823	GC/MS CC	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-02-1549

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 27485

PROJECT NAME: Former Pechiney Cast Plate Facility		DATE: 2/21/14	PAGE 1 OF 2
PROJECT NUMBER: 01061270030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		14-02-1549
TURNAROUND TIME: Rush			
SAMPLE SHIPMENT METHOD: Lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 714 895 5494		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	VOCs (8260B)	Cammeta (6020)	TPHd (8015M)	PCBs (8082)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2/21/14	0805	#836	X	X	X	X	4oz. jar / 5035 Kit	S		*	✓		5	
2		0875	#837	X	X	X	X		S		*	✓		5	
3		0853	#838	X	X	X	X		S		*	✓		5	
4		0900	#839	X	X	X	X		S		*	✓		5	
5		0920	#840	X	X	X	X		S		*	✓		5	
6		0935	#841	X	X	X	X		S		*	✓		5	
7		1000	#842	X	X	X	X		S		*	✓		5	
8		1030	~~#843~~ #844	X	X	X	X		S		*	✓		5	
9		1010	#843	X	X	X	X		S		*	✓		5	
10		1050	#845	X	X	X	X		S		*	✓		5	
11		1120	#846	X	X	X	X		S		*	✓		5	
12		1220	#847	X	X	X	X		S		*	✓		5	
13		1205	#848	X	X	X	X		S		*	✓		5	
14		1230	#849	X	X	X	X		S		*	✓		5	
15		1300	#850	X	X	X	X		S		*	✓		5	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Jorge Perez COMPANY: Amec	2/21/14	1500	SIGNATURE: [signature] PRINTED NAME: Chuong Vu COMPANY: CEL	2/21/14	1500
SIGNATURE: [signature] PRINTED NAME: Chuong Vu COMPANY: CEL	2/21/14	1600	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CEL	2/21/14	16:00
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 75

SAMPLING COMMENTS:

* 5035 Kit = methanol x1, Na$_2$S$_2$O$_3$ x2, 1 unpreserved
temp. blank incl. in Cooler

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 27486

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 2/21/14 — PAGE 2 OF 2
PROJECT NUMBER: 01062706030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS: 1549
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: Rush			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 714 895 5494		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	VOCs (EPA 8260B)	CAM metals (6010/7470)	TPHc (8015M)	PCBs (8082)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	2/21/14	1315	#851	X	X	X	X	4oz jar, 5035 kit	S		*	✓		5	
17		1330	#852	X	X	X	X		S		*	✓		5	
18		1345	#853	X	X	X	X		S		*	✓		5	
19	2/21/14	0800	QCTB-022114	X				40 ml VOA	W		HCl	✓		2	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	2/21/14	1500	SIGNATURE: [signature]	2/21/14	1500
PRINTED NAME: Jorge Perez			PRINTED NAME: Chiwong Vu		
COMPANY: Amec			COMPANY: CEL		
SIGNATURE: [signature]	2/21/14	1600	SIGNATURE: [signature]	2/21/14	1600
PRINTED NAME: Chiwong Vu			PRINTED NAME: DANNY CE		
COMPANY: CEL			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 17

SAMPLING COMMENTS:

* See page 1

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02- 1 5 4 9

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Amec

DATE: 02 / 21 / 14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3 . 4 °C - 0.3 °C (CF) = 3 . 1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 820

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 820

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** WO3

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis	WO3 2/21/14		
Volatile analysis container(s) free of headspace	☑	☑	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☑TerraCores® (3) ☑ 2oz PJ

Aqueous: ☐VOA (-19) (2) ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:** N/A **Labeled/Checked by:** WO3

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 820

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** WO3

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02- 1 5 4 9

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample label(s) do not match COC** – Note in comments
  - ☐ Sample ID
  - ☐ Date and/or Time Collected
  - ☐ Project Information
  - ☐ # of Container(s)
  - ☐ Analysis
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ Water present in sample container
  - ☐ Broken
- ☐ Sample container(s) not labeled
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ Flat
  - ☐ Very low in volume
  - ☐ Leaking (Not transferred - duplicate bag submitted)
  - ☐ Leaking (transferred into Calscience Tedlar® Bag*)
  - ☐ Leaking (transferred into Client's Tedlar® Bag*)
- ☐ Other: _____

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis
19	A,B	2							

Comments: _____

*Transferred at Client's request.

Initial / Date: 920 02/21/14

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-02-1641

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 02/26/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-02-1641

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-02-1641 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/24/14. They were assigned to Work Order 14-02-1641.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1641
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	02/24/14 17:30
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
566-IV-F/F-SS-003	14-02-1641-1	02/24/14 11:27	1	Solid
566-IV-F/F-SS-004	14-02-1641-2	02/24/14 11:29	1	Solid
566-IV-F/F-SS-005	14-02-1641-3	02/24/14 11:30	1	Solid
566-IV-F/F-SS-006	14-02-1641-4	02/24/14 11:31	1	Solid
566-IV-F/F-SS-007	14-02-1641-5	02/24/14 11:32	1	Solid
566-IV-F/F-SS-008	14-02-1641-6	02/24/14 11:33	1	Solid
566-IV-F/F-SS-009	14-02-1641-7	02/24/14 11:35	1	Solid
562-IV-F/F-SS-001	14-02-1641-8	02/24/14 12:45	1	Solid
562-IV-F/F-SS-002	14-02-1641-9	02/24/14 12:47	1	Solid
562-IV-F/F-SS-003	14-02-1641-10	02/24/14 12:48	1	Solid
562-IV-F/F-SS-004	14-02-1641-11	02/24/14 12:49	1	Solid
562-IV-F/F-SS-005	14-02-1641-12	02/24/14 12:50	1	Solid
562-IV-F/F-SS-006	14-02-1641-13	02/24/14 12:52	1	Solid
562-IV-F/F-SS-007	14-02-1641-14	02/24/14 12:53	1	Solid
562-IV-F/F-SS-008	14-02-1641-15	02/24/14 12:54	1	Solid
562-IV-F/F-SS-009	14-02-1641-16	02/24/14 12:56	1	Solid
563-IV-F/F-SS-001	14-02-1641-17	02/24/14 13:03	1	Solid
563-IV-F/F-SS-002	14-02-1641-18	02/24/14 13:05	1	Solid
563-IV-F/F-SS-003	14-02-1641-19	02/24/14 13:06	1	Solid
563-IV-F/F-SS-004	14-02-1641-20	02/24/14 13:07	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1641
		Project Name:	Former Pechiney Cast Plate / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
566-IV-F/F-SS-003 (14-02-1641-1)						
Arsenic	1.88		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	118		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.455		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.7		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.6		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	16.2		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	9.75		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.4		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.0		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	52.1		1.02	mg/kg	EPA 6010B	EPA 3050B
C15-C16	5.7		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	15		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	29		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	38		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	39		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	12		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	130		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	76		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	81		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	54		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	480		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
566-IV-F/F-SS-004 (14-02-1641-2)						
Arsenic	1.65		0.777	mg/kg	EPA 6010B	EPA 3050B
Barium	111		0.518	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.378		0.259	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.4		0.259	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.84		0.259	mg/kg	EPA 6010B	EPA 3050B
Copper	14.9		0.518	mg/kg	EPA 6010B	EPA 3050B
Lead	7.58		0.518	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.8		0.259	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.7		0.259	mg/kg	EPA 6010B	EPA 3050B
Zinc	60.7		1.04	mg/kg	EPA 6010B	EPA 3050B
C25-C28	7.5		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	10		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	17		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	21		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	24		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	91		4.9	mg/kg	EPA 8015B (M)	EPA 3550B

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-02-1641 Former Pechiney Cast Plate / 0106270030 02/24/14
Attn:	Linda Conlan		Page 2 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
566-IV-F/F-SS-005 (14-02-1641-3)						
Barium	83.8		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.426		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.5		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.42		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	8.94		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	3.37		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.07		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.0		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	31.9		1.02	mg/kg	EPA 6010B	EPA 3050B
566-IV-F/F-SS-006 (14-02-1641-4)						
Arsenic	1.45		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	115		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.399		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.0		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.95		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	15.9		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	9.36		0.510	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.9		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.4		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	63.4		1.02	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.102		0.0833	mg/kg	EPA 7471A	EPA 7471A Total
C17-C18	6.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	9.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	9.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	22		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	120		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	180		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1641
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
566-IV-F/F-SS-007 (14-02-1641-5)						
Arsenic	1.07		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.476		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.7		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.81		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	9.85		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	4.20		0.510	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.2		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.9		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	31.8		1.02	mg/kg	EPA 6010B	EPA 3050B
566-IV-F/F-SS-008 (14-02-1641-6)						
Arsenic	4.19		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	111		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.374		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.1		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.48		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	44.6		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	41.8		0.510	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.299		0.255	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.7		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.4		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	108		1.02	mg/kg	EPA 6010B	EPA 3050B
C19-C20	32		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	37		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	48		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	180		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	670		25	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-02-1641 Former Pechiney Cast Plate / 0106270030 02/24/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
566-IV-F/F-SS-009 (14-02-1641-7)						
Barium	159		0.518	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.8		0.259	mg/kg	EPA 6010B	EPA 3050B
Cobalt	4.60		0.259	mg/kg	EPA 6010B	EPA 3050B
Copper	6.28		0.518	mg/kg	EPA 6010B	EPA 3050B
Lead	94.3		0.518	mg/kg	EPA 6010B	EPA 3050B
Nickel	5.01		0.259	mg/kg	EPA 6010B	EPA 3050B
Vanadium	17.8		0.259	mg/kg	EPA 6010B	EPA 3050B
Zinc	29.2		1.04	mg/kg	EPA 6010B	EPA 3050B
562-IV-F/F-SS-001 (14-02-1641-8)						
Arsenic	1.12		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	158		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.443		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	21.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	13.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	19.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.42		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	14.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	43.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	58.5		1.00	mg/kg	EPA 6010B	EPA 3050B
562-IV-F/F-SS-002 (14-02-1641-9)						
Arsenic	0.798		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	109		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.434		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.4		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.3		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	15.1		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	4.91		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.3		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.1		1.01	mg/kg	EPA 6010B	EPA 3050B

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1641
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		Page 5 of 10

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
562-IV-F/F-SS-003 (14-02-1641-10)						
Arsenic	1.49		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	124		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.486		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.4		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.9		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	11.8		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	5.62		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.8		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.1		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	39.2		0.985	mg/kg	EPA 6010B	EPA 3050B
562-IV-F/F-SS-004 (14-02-1641-11)						
Arsenic	0.973		0.721	mg/kg	EPA 6010B	EPA 3050B
Barium	87.6		0.481	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.355		0.240	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.9		0.240	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.42		0.240	mg/kg	EPA 6010B	EPA 3050B
Copper	10.2		0.481	mg/kg	EPA 6010B	EPA 3050B
Lead	6.66		0.481	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.37		0.240	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.1		0.240	mg/kg	EPA 6010B	EPA 3050B
Zinc	33.9		0.962	mg/kg	EPA 6010B	EPA 3050B

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1641
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
562-IV-F/F-SS-005 (14-02-1641-12)						
Arsenic	1.82		0.785	mg/kg	EPA 6010B	EPA 3050B
Barium	150		0.524	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.517		0.262	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.1		0.262	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.2		0.262	mg/kg	EPA 6010B	EPA 3050B
Copper	10.9		0.524	mg/kg	EPA 6010B	EPA 3050B
Lead	5.98		0.524	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.3		0.262	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.0		0.262	mg/kg	EPA 6010B	EPA 3050B
Zinc	36.7		1.05	mg/kg	EPA 6010B	EPA 3050B
C9-C10	150		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	57		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	27		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	34		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	84		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	100		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	72		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	69		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	65		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	77		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	63		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	66		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	49		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	920		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
sec-Butylbenzene	17		4.9	ug/kg	EPA 8260B	EPA 5030C
p-Isopropyltoluene	6.4		4.9	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	36		4.9	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	35		4.9	ug/kg	EPA 8260B	EPA 5030C

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1641
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		Page 7 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
562-IV-F/F-SS-006 (14-02-1641-13)						
Arsenic	1.43		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.505		0.256	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.8		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.5		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	12.0		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	3.97		0.513	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.8		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.5		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	43.7		1.03	mg/kg	EPA 6010B	EPA 3050B
562-IV-F/F-SS-007 (14-02-1641-14)						
Arsenic	1.49		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	94.5		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.316		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.6		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.81		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	15.4		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	10.6		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.94		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.5		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	52.5		1.01	mg/kg	EPA 6010B	EPA 3050B
C25-C28	40		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	69		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	66		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	130		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	93		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	440		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	95		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	140		50	ug/kg	EPA 8082	EPA 3540C

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1641
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		Page 8 of 10

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
562-IV-F/F-SS-008 (14-02-1641-15)						
Arsenic	1.70		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	118		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.439		0.251	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.0		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.3		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	16.1		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	2.36		0.503	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.1		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	40.8		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	52.6		1.01	mg/kg	EPA 6010B	EPA 3050B
C29-C32	6.2		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	7.4		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	11		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	6.6		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	46		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
562-IV-F/F-SS-009 (14-02-1641-16)						
Barium	112		0.524	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.430		0.262	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.8		0.262	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.38		0.262	mg/kg	EPA 6010B	EPA 3050B
Copper	9.65		0.524	mg/kg	EPA 6010B	EPA 3050B
Lead	3.06		0.524	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.78		0.262	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.6		0.262	mg/kg	EPA 6010B	EPA 3050B
Zinc	38.7		1.05	mg/kg	EPA 6010B	EPA 3050B
563-IV-F/F-SS-001 (14-02-1641-17)						
Barium	144		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.429		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	19.7		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.6		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	18.4		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	1.32		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	14.0		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	41.6		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	56.1		1.01	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1641
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
563-IV-F/F-SS-002 (14-02-1641-18)						
Barium	93.8		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.341		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.4		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.23		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	12.2		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	1.71		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.55		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	44.0		1.01	mg/kg	EPA 6010B	EPA 3050B
C29-C32	7.3		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	6.6		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	8.9		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	31		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
563-IV-F/F-SS-003 (14-02-1641-19)						
Arsenic	0.870		0.721	mg/kg	EPA 6010B	EPA 3050B
Barium	91.9		0.481	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.447		0.240	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.9		0.240	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.67		0.240	mg/kg	EPA 6010B	EPA 3050B
Copper	10.1		0.481	mg/kg	EPA 6010B	EPA 3050B
Lead	5.54		0.481	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.3		0.240	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.5		0.240	mg/kg	EPA 6010B	EPA 3050B
Zinc	33.8		0.962	mg/kg	EPA 6010B	EPA 3050B
563-IV-F/F-SS-004 (14-02-1641-20)						
Arsenic	0.780		0.728	mg/kg	EPA 6010B	EPA 3050B
Barium	109		0.485	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.382		0.243	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.4		0.243	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.19		0.243	mg/kg	EPA 6010B	EPA 3050B
Copper	12.3		0.485	mg/kg	EPA 6010B	EPA 3050B
Lead	12.2		0.485	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.65		0.243	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.7		0.243	mg/kg	EPA 6010B	EPA 3050B
Zinc	49.4		0.971	mg/kg	EPA 6010B	EPA 3050B
C6-C44 Total	8.8		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1641
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-003	**14-02-1641-1-A**	**02/24/14 11:27**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 15:01**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	5.7	4.9	0.980	
C17-C18	15	4.9	0.980	
C19-C20	29	4.9	0.980	
C21-C22	38	4.9	0.980	
C23-C24	39	4.9	0.980	
C25-C28	12	4.9	0.980	
C29-C32	130	4.9	0.980	
C33-C36	76	4.9	0.980	
C37-C40	81	4.9	0.980	
C41-C44	54	4.9	0.980	
C6-C44 Total	480	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-004	**14-02-1641-2-A**	**02/24/14 11:29**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 15:17**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	7.5	4.9	0.980	
C29-C32	10	4.9	0.980	
C33-C36	17	4.9	0.980	
C37-C40	21	4.9	0.980	
C41-C44	24	4.9	0.980	
C6-C44 Total	91	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	119	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-005	**14-02-1641-3-A**	**02/24/14 11:30**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 15:32**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	113	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-006	**14-02-1641-4-A**	**02/24/14 11:31**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 15:48**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	6.0	5.0	0.990	
C19-C20	10	5.0	0.990	
C21-C22	9.5	5.0	0.990	
C23-C24	9.1	5.0	0.990	
C25-C28	12	5.0	0.990	
C29-C32	22	5.0	0.990	
C33-C36	17	5.0	0.990	
C37-C40	24	5.0	0.990	
C41-C44	12	5.0	0.990	
C6-C44 Total	120	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	117	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-007	**14-02-1641-5-A**	**02/24/14 11:32**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 16:03**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	120	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-008	**14-02-1641-6-A**	**02/24/14 11:33**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 16:20**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.01	
C7	ND	25	5.01	
C8	ND	25	5.01	
C9-C10	ND	25	5.01	
C11-C12	ND	25	5.01	
C13-C14	ND	25	5.01	
C15-C16	ND	25	5.01	
C17-C18	ND	25	5.01	
C19-C20	32	25	5.01	
C21-C22	37	25	5.01	
C23-C24	48	25	5.01	
C25-C28	ND	25	5.01	
C29-C32	180	25	5.01	
C33-C36	120	25	5.01	
C37-C40	120	25	5.01	
C41-C44	120	25	5.01	
C6-C44 Total	670	25	5.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	127	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-009	**14-02-1641-7-A**	**02/24/14 11:35**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 16:36**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	108	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-001	**14-02-1641-8-A**	**02/24/14 12:45**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 16:52**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	121	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-002	**14-02-1641-9-A**	**02/24/14 12:47**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 18:26**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	113	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-003	**14-02-1641-10-A**	**02/24/14 12:48**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 18:42**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-004	**14-02-1641-11-A**	**02/24/14 12:49**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 19:13**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	115	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 12 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-005	**14-02-1641-12-A**	**02/24/14 12:50**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 19:28**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	150	5.0	1.00	
C11-C12	57	5.0	1.00	
C13-C14	27	5.0	1.00	
C15-C16	34	5.0	1.00	
C17-C18	84	5.0	1.00	
C19-C20	100	5.0	1.00	
C21-C22	72	5.0	1.00	
C23-C24	69	5.0	1.00	
C25-C28	65	5.0	1.00	
C29-C32	77	5.0	1.00	
C33-C36	63	5.0	1.00	
C37-C40	66	5.0	1.00	
C41-C44	49	5.0	1.00	
C6-C44 Total	920	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-006	**14-02-1641-13-A**	**02/24/14 12:52**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 19:44**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 14 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-007	**14-02-1641-14-A**	**02/24/14 12:53**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 20:00**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	4.95	
C7	ND	25	4.95	
C8	ND	25	4.95	
C9-C10	ND	25	4.95	
C11-C12	ND	25	4.95	
C13-C14	ND	25	4.95	
C15-C16	ND	25	4.95	
C17-C18	ND	25	4.95	
C19-C20	ND	25	4.95	
C21-C22	ND	25	4.95	
C23-C24	ND	25	4.95	
C25-C28	40	25	4.95	
C29-C32	69	25	4.95	
C33-C36	66	25	4.95	
C37-C40	130	25	4.95	
C41-C44	93	25	4.95	
C6-C44 Total	440	25	4.95	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	121	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-008	**14-02-1641-15-A**	**02/24/14 12:54**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 20:15**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	6.2	4.9	0.980	
C33-C36	7.4	4.9	0.980	
C37-C40	11	4.9	0.980	
C41-C44	6.6	4.9	0.980	
C6-C44 Total	46	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 16 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-009	**14-02-1641-16-A**	**02/24/14 12:56**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 20:30**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	114	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-001	**14-02-1641-17-A**	**02/24/14 13:03**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 20:46**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 18 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-002	**14-02-1641-18-A**	**02/24/14 13:05**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 21:01**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	7.3	4.9	0.980	
C33-C36	6.6	4.9	0.980	
C37-C40	8.9	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	31	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	113	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-003	**14-02-1641-19-A**	**02/24/14 13:06**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 21:17**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 20 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-004	**14-02-1641-20-A**	**02/24/14 13:07**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 21:33**	**140225B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	8.8	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 21 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-787**	**N/A**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 13:58**	**140225B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	106	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-003	**14-02-1641-1-A**	**02/24/14 11:27**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:33**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	1.88	0.761	1.02	
Barium	118	0.508	1.02	
Beryllium	0.455	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	17.7	0.254	1.02	
Cobalt	10.6	0.254	1.02	
Copper	16.2	0.508	1.02	
Lead	9.75	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	12.4	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	37.0	0.254	1.02	
Zinc	52.1	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-004	**14-02-1641-2-A**	**02/24/14 11:29**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:34**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.777	1.04	
Arsenic	1.65	0.777	1.04	
Barium	111	0.518	1.04	
Beryllium	0.378	0.259	1.04	
Cadmium	ND	0.518	1.04	
Chromium	15.4	0.259	1.04	
Cobalt	9.84	0.259	1.04	
Copper	14.9	0.518	1.04	
Lead	7.58	0.518	1.04	
Molybdenum	ND	0.259	1.04	
Nickel	10.8	0.259	1.04	
Selenium	ND	0.777	1.04	
Silver	ND	0.259	1.04	
Thallium	ND	0.777	1.04	
Vanadium	35.7	0.259	1.04	
Zinc	60.7	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-005	**14-02-1641-3-A**	**02/24/14 11:30**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:35**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	ND	0.761	1.02	
Barium	83.8	0.508	1.02	
Beryllium	0.426	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	14.5	0.254	1.02	
Cobalt	7.42	0.254	1.02	
Copper	8.94	0.508	1.02	
Lead	3.37	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	9.07	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	34.0	0.254	1.02	
Zinc	31.9	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-006	**14-02-1641-4-A**	**02/24/14 11:31**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:36**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	1.45	0.765	1.02	
Barium	115	0.510	1.02	
Beryllium	0.399	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	16.0	0.255	1.02	
Cobalt	9.95	0.255	1.02	
Copper	15.9	0.510	1.02	
Lead	9.36	0.510	1.02	
Molybdenum	ND	0.255	1.02	
Nickel	10.9	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	36.4	0.255	1.02	
Zinc	63.4	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-007	**14-02-1641-5-A**	**02/24/14 11:32**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:41**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	1.07	0.765	1.02	
Barium	129	0.510	1.02	
Beryllium	0.476	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	16.7	0.255	1.02	
Cobalt	9.81	0.255	1.02	
Copper	9.85	0.510	1.02	
Lead	4.20	0.510	1.02	
Molybdenum	ND	0.255	1.02	
Nickel	11.2	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	34.9	0.255	1.02	
Zinc	31.8	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-008	**14-02-1641-6-A**	**02/24/14 11:33**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:42**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	4.19	0.765	1.02	
Barium	111	0.510	1.02	
Beryllium	0.374	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	16.1	0.255	1.02	
Cobalt	9.48	0.255	1.02	
Copper	44.6	0.510	1.02	
Lead	41.8	0.510	1.02	
Molybdenum	0.299	0.255	1.02	
Nickel	11.7	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	35.4	0.255	1.02	
Zinc	108	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-009	**14-02-1641-7-A**	**02/24/14 11:35**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:43**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.777	1.04	
Arsenic	ND	0.777	1.04	
Barium	159	0.518	1.04	
Beryllium	ND	0.259	1.04	
Cadmium	ND	0.518	1.04	
Chromium	13.8	0.259	1.04	
Cobalt	4.60	0.259	1.04	
Copper	6.28	0.518	1.04	
Lead	94.3	0.518	1.04	
Molybdenum	ND	0.259	1.04	
Nickel	5.01	0.259	1.04	
Selenium	ND	0.777	1.04	
Silver	ND	0.259	1.04	
Thallium	ND	0.777	1.04	
Vanadium	17.8	0.259	1.04	
Zinc	29.2	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-001	**14-02-1641-8-A**	**02/24/14 12:45**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:44**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.12	0.750	1.00	
Barium	158	0.500	1.00	
Beryllium	0.443	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	21.2	0.250	1.00	
Cobalt	13.1	0.250	1.00	
Copper	19.7	0.500	1.00	
Lead	1.42	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	14.7	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	43.7	0.250	1.00	
Zinc	58.5	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-002	**14-02-1641-9-A**	**02/24/14 12:47**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:46**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	0.798	0.758	1.01	
Barium	109	0.505	1.01	
Beryllium	0.434	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	16.4	0.253	1.01	
Cobalt	10.3	0.253	1.01	
Copper	15.1	0.505	1.01	
Lead	4.91	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	11.3	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	37.8	0.253	1.01	
Zinc	48.1	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-003	**14-02-1641-10-A**	**02/24/14 12:48**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:47**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	1.49	0.739	0.985	
Barium	124	0.493	0.985	
Beryllium	0.486	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	17.4	0.246	0.985	
Cobalt	10.9	0.246	0.985	
Copper	11.8	0.493	0.985	
Lead	5.62	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	11.8	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	37.1	0.246	0.985	
Zinc	39.2	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-004	**14-02-1641-11-A**	**02/24/14 12:49**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:48**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.721	0.962	
Arsenic	0.973	0.721	0.962	
Barium	87.6	0.481	0.962	
Beryllium	0.355	0.240	0.962	
Cadmium	ND	0.481	0.962	
Chromium	12.9	0.240	0.962	
Cobalt	7.42	0.240	0.962	
Copper	10.2	0.481	0.962	
Lead	6.66	0.481	0.962	
Molybdenum	ND	0.240	0.962	
Nickel	8.37	0.240	0.962	
Selenium	ND	0.721	0.962	
Silver	ND	0.240	0.962	
Thallium	ND	0.721	0.962	
Vanadium	31.1	0.240	0.962	
Zinc	33.9	0.962	0.962	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 12 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-005	**14-02-1641-12-A**	**02/24/14 12:50**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:49**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.785	1.05	
Arsenic	1.82	0.785	1.05	
Barium	150	0.524	1.05	
Beryllium	0.517	0.262	1.05	
Cadmium	ND	0.524	1.05	
Chromium	18.1	0.262	1.05	
Cobalt	11.2	0.262	1.05	
Copper	10.9	0.524	1.05	
Lead	5.98	0.524	1.05	
Molybdenum	ND	0.262	1.05	
Nickel	12.3	0.262	1.05	
Selenium	ND	0.785	1.05	
Silver	ND	0.262	1.05	
Thallium	ND	0.785	1.05	
Vanadium	38.0	0.262	1.05	
Zinc	36.7	1.05	1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-006	**14-02-1641-13-A**	**02/24/14 12:52**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:50**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	1.43	0.769	1.03	
Barium	129	0.513	1.03	
Beryllium	0.505	0.256	1.03	
Cadmium	ND	0.513	1.03	
Chromium	17.8	0.256	1.03	
Cobalt	10.5	0.256	1.03	
Copper	12.0	0.513	1.03	
Lead	3.97	0.513	1.03	
Molybdenum	ND	0.256	1.03	
Nickel	11.8	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	38.5	0.256	1.03	
Zinc	43.7	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 14 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-007	**14-02-1641-14-A**	**02/24/14 12:53**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:51**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	1.49	0.758	1.01	
Barium	94.5	0.505	1.01	
Beryllium	0.316	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	13.6	0.253	1.01	
Cobalt	8.81	0.253	1.01	
Copper	15.4	0.505	1.01	
Lead	10.6	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	9.94	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	32.5	0.253	1.01	
Zinc	52.5	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-008	**14-02-1641-15-A**	**02/24/14 12:54**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:55**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	1.70	0.754	1.01	
Barium	118	0.503	1.01	
Beryllium	0.439	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	17.0	0.251	1.01	
Cobalt	11.3	0.251	1.01	
Copper	16.1	0.503	1.01	
Lead	2.36	0.503	1.01	
Molybdenum	ND	0.251	1.01	
Nickel	12.1	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	40.8	0.251	1.01	
Zinc	52.6	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 16 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-009	**14-02-1641-16-A**	**02/24/14 12:56**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:57**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.785	1.05	
Arsenic	ND	0.785	1.05	
Barium	112	0.524	1.05	
Beryllium	0.430	0.262	1.05	
Cadmium	ND	0.524	1.05	
Chromium	15.8	0.262	1.05	
Cobalt	8.38	0.262	1.05	
Copper	9.65	0.524	1.05	
Lead	3.06	0.524	1.05	
Molybdenum	ND	0.262	1.05	
Nickel	9.78	0.262	1.05	
Selenium	ND	0.785	1.05	
Silver	ND	0.262	1.05	
Thallium	ND	0.785	1.05	
Vanadium	34.6	0.262	1.05	
Zinc	38.7	1.05	1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-001	**14-02-1641-17-A**	**02/24/14 13:03**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:58**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	ND	0.758	1.01	
Barium	144	0.505	1.01	
Beryllium	0.429	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	19.7	0.253	1.01	
Cobalt	12.6	0.253	1.01	
Copper	18.4	0.505	1.01	
Lead	1.32	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	14.0	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	41.6	0.253	1.01	
Zinc	56.1	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 18 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-002	**14-02-1641-18-A**	**02/24/14 13:05**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:59**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	ND	0.758	1.01	
Barium	93.8	0.505	1.01	
Beryllium	0.341	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	13.4	0.253	1.01	
Cobalt	9.23	0.253	1.01	
Copper	12.2	0.505	1.01	
Lead	1.71	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	9.55	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	32.8	0.253	1.01	
Zinc	44.0	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-003	**14-02-1641-19-A**	**02/24/14 13:06**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 15:00**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.721	0.962	
Arsenic	0.870	0.721	0.962	
Barium	91.9	0.481	0.962	
Beryllium	0.447	0.240	0.962	
Cadmium	ND	0.481	0.962	
Chromium	15.9	0.240	0.962	
Cobalt	8.67	0.240	0.962	
Copper	10.1	0.481	0.962	
Lead	5.54	0.481	0.962	
Molybdenum	ND	0.240	0.962	
Nickel	10.3	0.240	0.962	
Selenium	ND	0.721	0.962	
Silver	ND	0.240	0.962	
Thallium	ND	0.721	0.962	
Vanadium	32.5	0.240	0.962	
Zinc	33.8	0.962	0.962	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 20 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-004	**14-02-1641-20-A**	**02/24/14 13:07**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 15:01**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.728	0.971	
Arsenic	0.780	0.728	0.971	
Barium	109	0.485	0.971	
Beryllium	0.382	0.243	0.971	
Cadmium	ND	0.485	0.971	
Chromium	14.4	0.243	0.971	
Cobalt	8.19	0.243	0.971	
Copper	12.3	0.485	0.971	
Lead	12.2	0.485	0.971	
Molybdenum	ND	0.243	0.971	
Nickel	9.65	0.243	0.971	
Selenium	ND	0.728	0.971	
Silver	ND	0.243	0.971	
Thallium	ND	0.728	0.971	
Vanadium	28.7	0.243	0.971	
Zinc	49.4	0.971	0.971	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 21 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18065**	**N/A**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:20**	**140224L08**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-003	**14-02-1641-1-A**	**02/24/14 11:27**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:33**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

566-IV-F/F-SS-004	**14-02-1641-2-A**	**02/24/14 11:29**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:36**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

566-IV-F/F-SS-005	**14-02-1641-3-A**	**02/24/14 11:30**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:38**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

566-IV-F/F-SS-006	**14-02-1641-4-A**	**02/24/14 11:31**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:40**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.102	0.0833	1.00	

566-IV-F/F-SS-007	**14-02-1641-5-A**	**02/24/14 11:32**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:42**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

566-IV-F/F-SS-008	**14-02-1641-6-A**	**02/24/14 11:33**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:45**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

566-IV-F/F-SS-009	**14-02-1641-7-A**	**02/24/14 11:35**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:47**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

562-IV-F/F-SS-001	**14-02-1641-8-A**	**02/24/14 12:45**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:53**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-002	**14-02-1641-9-A**	**02/24/14 12:47**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:00**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

562-IV-F/F-SS-003	**14-02-1641-10-A**	**02/24/14 12:48**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:02**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

562-IV-F/F-SS-004	**14-02-1641-11-A**	**02/24/14 12:49**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:04**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

562-IV-F/F-SS-005	**14-02-1641-12-A**	**02/24/14 12:50**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:07**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

562-IV-F/F-SS-006	**14-02-1641-13-A**	**02/24/14 12:52**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:09**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

562-IV-F/F-SS-007	**14-02-1641-14-A**	**02/24/14 12:53**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:11**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

562-IV-F/F-SS-008	**14-02-1641-15-A**	**02/24/14 12:54**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:13**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

562-IV-F/F-SS-009	**14-02-1641-16-A**	**02/24/14 12:56**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:20**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-001	**14-02-1641-17-A**	**02/24/14 13:03**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:22**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-002	**14-02-1641-18-A**	**02/24/14 13:05**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:25**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-003	**14-02-1641-19-A**	**02/24/14 13:06**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:27**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0781	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-004	**14-02-1641-20-A**	**02/24/14 13:07**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:29**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-48**	**N/A**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:29**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-003	**14-02-1641-1-A**	**02/24/14 11:27**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 11:31**	**140224L13**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	9.96	
Aroclor-1221	ND	500	9.96	
Aroclor-1232	ND	500	9.96	
Aroclor-1242	ND	500	9.96	
Aroclor-1248	ND	500	9.96	
Aroclor-1254	ND	500	9.96	
Aroclor-1260	ND	500	9.96	
Aroclor-1262	ND	500	9.96	
Aroclor-1268	ND	500	9.96	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

566-IV-F/F-SS-004	**14-02-1641-2-A**	**02/24/14 11:29**	**Solid**	**GC 31**	**02/24/14**	**02/25/14 23:36**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	60-125	
2,4,5,6-Tetrachloro-m-Xylene	82	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-005	**14-02-1641-3-A**	**02/24/14 11:30**	**Solid**	**GC 31**	**02/24/14**	**02/25/14 23:55**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	60-125	
2,4,5,6-Tetrachloro-m-Xylene	82	50-130	

566-IV-F/F-SS-006	**14-02-1641-4-A**	**02/24/14 11:31**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 00:15**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	180	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-007	**14-02-1641-5-A**	**02/24/14 11:32**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 00:34**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	60-125	
2,4,5,6-Tetrachloro-m-Xylene	82	50-130	

566-IV-F/F-SS-008	**14-02-1641-6-A**	**02/24/14 11:33**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 11:50**	**140224L13**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-009	**14-02-1641-7-A**	**02/24/14 11:35**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 00:53**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

562-IV-F/F-SS-001	**14-02-1641-8-A**	**02/24/14 12:45**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 01:12**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-002	**14-02-1641-9-A**	**02/24/14 12:47**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 01:31**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

562-IV-F/F-SS-003	**14-02-1641-10-A**	**02/24/14 12:48**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 01:50**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-004	**14-02-1641-11-A**	**02/24/14 12:49**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 02:09**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

562-IV-F/F-SS-005	**14-02-1641-12-A**	**02/24/14 12:50**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 02:28**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-006	**14-02-1641-13-A**	**02/24/14 12:52**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 02:47**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

562-IV-F/F-SS-007	**14-02-1641-14-A**	**02/24/14 12:53**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 03:06**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	95	50	0.996	
Aroclor-1254	140	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-008	**14-02-1641-15-A**	**02/24/14 12:54**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 03:25**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

562-IV-F/F-SS-009	**14-02-1641-16-A**	**02/24/14 12:56**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 03:44**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-001	**14-02-1641-17-A**	**02/24/14 13:03**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 04:04**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	78	50-130	

563-IV-F/F-SS-002	**14-02-1641-18-A**	**02/24/14 13:05**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 04:23**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-003	**14-02-1641-19-A**	**02/24/14 13:06**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 10:15**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

563-IV-F/F-SS-004	**14-02-1641-20-A**	**02/24/14 13:07**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 10:34**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-203**	**N/A**	**Solid**	**GC 31**	**02/24/14**	**02/25/14 23:17**	**140224L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-003	**14-02-1641-1-A**	**02/24/14 11:27**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 13:10**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 2 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	82	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	88	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-004	**14-02-1641-2-A**	**02/24/14 11:29**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 14:54**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 4 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	60-132	
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-005	**14-02-1641-3-A**	**02/24/14 11:30**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 15:20**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 6 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	60-132	
Dibromofluoromethane	105	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-006	**14-02-1641-4-A**	**02/24/14 11:31**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 15:45**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 8 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	83	60-132	
Dibromofluoromethane	105	63-141	
1,2-Dichloroethane-d4	93	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-007	**14-02-1641-5-A**	**02/24/14 11:32**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 16:11**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 10 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	82	60-132	
Dibromofluoromethane	105	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-008	**14-02-1641-6-A**	**02/24/14 11:33**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 22:15**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 12 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	91	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-009	**14-02-1641-7-A**	**02/24/14 11:35**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 17:03**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 14 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	60-132	
Dibromofluoromethane	108	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-001	**14-02-1641-8-A**	**02/24/14 12:45**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 17:29**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 16 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	87	60-132	
Dibromofluoromethane	108	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-002	**14-02-1641-9-A**	**02/24/14 12:47**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 17:55**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 18 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	60-132	
Dibromofluoromethane	110	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-003	**14-02-1641-10-A**	**02/24/14 12:48**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 18:21**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.7	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 20 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.7	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	60-132	
Dibromofluoromethane	108	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 21 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-004	**14-02-1641-11-A**	**02/24/14 12:49**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 18:47**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 22 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	60-132	
Dibromofluoromethane	107	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 23 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-005	**14-02-1641-12-A**	**02/24/14 12:50**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 19:13**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	17	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 24 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	6.4	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	36	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	35	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	126	60-132	
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 25 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-006	**14-02-1641-13-A**	**02/24/14 12:52**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 19:38**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 26 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	60-132	
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	76	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 27 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-007	**14-02-1641-14-A**	**02/24/14 12:53**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 20:04**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 28 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	60-132	
Dibromofluoromethane	93	63-141	
1,2-Dichloroethane-d4	77	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 29 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-008	**14-02-1641-15-A**	**02/24/14 12:54**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 20:30**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.8	1.00	
Bromobenzene	ND	4.8	1.00	
Bromochloromethane	ND	4.8	1.00	
Bromodichloromethane	ND	4.8	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	48	1.00	
n-Butylbenzene	ND	4.8	1.00	
sec-Butylbenzene	ND	4.8	1.00	
tert-Butylbenzene	ND	4.8	1.00	
Carbon Disulfide	ND	48	1.00	
Carbon Tetrachloride	ND	4.8	1.00	
Chlorobenzene	ND	4.8	1.00	
Chloroethane	ND	4.8	1.00	
Chloroform	ND	4.8	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.8	1.00	
4-Chlorotoluene	ND	4.8	1.00	
Dibromochloromethane	ND	4.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.6	1.00	
1,2-Dibromoethane	ND	4.8	1.00	
Dibromomethane	ND	4.8	1.00	
1,2-Dichlorobenzene	ND	4.8	1.00	
1,3-Dichlorobenzene	ND	4.8	1.00	
1,4-Dichlorobenzene	ND	4.8	1.00	
Dichlorodifluoromethane	ND	4.8	1.00	
1,1-Dichloroethane	ND	4.8	1.00	
1,2-Dichloroethane	ND	4.8	1.00	
1,1-Dichloroethene	ND	4.8	1.00	
c-1,2-Dichloroethene	ND	4.8	1.00	
t-1,2-Dichloroethene	ND	4.8	1.00	
1,2-Dichloropropane	ND	4.8	1.00	
1,3-Dichloropropane	ND	4.8	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 30 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.8	1.00	
c-1,3-Dichloropropene	ND	4.8	1.00	
t-1,3-Dichloropropene	ND	4.8	1.00	
Ethylbenzene	ND	4.8	1.00	
2-Hexanone	ND	48	1.00	
Isopropylbenzene	ND	4.8	1.00	
p-Isopropyltoluene	ND	4.8	1.00	
Methylene Chloride	ND	48	1.00	
4-Methyl-2-Pentanone	ND	48	1.00	
Naphthalene	ND	48	1.00	
n-Propylbenzene	ND	4.8	1.00	
Styrene	ND	4.8	1.00	
1,1,1,2-Tetrachloroethane	ND	4.8	1.00	
1,1,2,2-Tetrachloroethane	ND	4.8	1.00	
Tetrachloroethene	ND	4.8	1.00	
Toluene	ND	4.8	1.00	
1,2,3-Trichlorobenzene	ND	9.6	1.00	
1,2,4-Trichlorobenzene	ND	4.8	1.00	
1,1,1-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	48	1.00	
Trichloroethene	ND	4.8	1.00	
1,2,3-Trichloropropane	ND	4.8	1.00	
1,2,4-Trimethylbenzene	ND	4.8	1.00	
Trichlorofluoromethane	ND	48	1.00	
1,3,5-Trimethylbenzene	ND	4.8	1.00	
Vinyl Acetate	ND	48	1.00	
Vinyl Chloride	ND	4.8	1.00	
p/m-Xylene	ND	4.8	1.00	
o-Xylene	ND	4.8	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	84	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	80	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 31 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-009	**14-02-1641-16-A**	**02/24/14 12:56**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 22:42**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 32 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	90	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 33 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-001	**14-02-1641-17-A**	**02/24/14 13:03**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 23:09**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 34 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	88	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 35 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-002	**14-02-1641-18-A**	**02/24/14 13:05**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 23:36**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 36 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	90	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 37 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-003	**14-02-1641-19-A**	**02/24/14 13:06**	**Solid**	**GC/MS BB**	**02/25/14**	**02/26/14 00:03**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 38 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	90	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 39 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-004	**14-02-1641-20-A**	**02/24/14 13:07**	**Solid**	**GC/MS BB**	**02/25/14**	**02/26/14 00:30**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 40 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	91	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 41 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8201**	**N/A**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 15:31**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 42 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	88	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 43 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8198**	**N/A**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 12:19**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1641
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 44 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	85	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
562-IV-F/F-SS-009	**Sample**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 20:30**	**140225S01**
562-IV-F/F-SS-009	**Matrix Spike**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 14:30**	**140225S01**
562-IV-F/F-SS-009	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 14:45**	**140225S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	396.7	99	388.1	97	64-130	2	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
562-IV-F/F-SS-001	**Sample**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:44**	**140224S08**
562-IV-F/F-SS-001	**Matrix Spike**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:31**	**140224S08**
562-IV-F/F-SS-001	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:32**	**140224S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	3.391	14	3.444	14	50-115	2	0-20	3
Arsenic	1.119	25.00	26.30	101	27.53	106	75-125	5	0-20	
Barium	158.2	25.00	180.4	4X	181.8	4X	75-125	4X	0-20	Q
Beryllium	0.4435	25.00	26.30	103	26.78	105	75-125	2	0-20	
Cadmium	ND	25.00	24.39	98	24.82	99	75-125	2	0-20	
Chromium	21.17	25.00	45.12	96	46.09	100	75-125	2	0-20	
Cobalt	13.11	25.00	37.78	99	38.96	103	75-125	3	0-20	
Copper	19.75	25.00	46.27	106	46.70	108	75-125	1	0-20	
Lead	1.418	25.00	25.63	97	26.02	98	75-125	1	0-20	
Molybdenum	ND	25.00	24.33	97	24.76	99	75-125	2	0-20	
Nickel	14.69	25.00	38.09	94	39.60	100	75-125	4	0-20	
Selenium	ND	25.00	21.79	87	22.70	91	75-125	4	0-20	
Silver	ND	12.50	13.14	105	13.31	106	75-125	1	0-20	
Thallium	ND	25.00	9.590	38	10.58	42	75-125	10	0-20	3
Vanadium	43.74	25.00	67.37	95	68.27	98	75-125	1	0-20	
Zinc	58.51	25.00	78.30	79	80.46	88	75-125	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
562-IV-F/F-SS-001	**Sample**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:53**	**140225S01**
562-IV-F/F-SS-001	**Matrix Spike**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:56**	**140225S01**
562-IV-F/F-SS-001	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:58**	**140225S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7962	95	0.8285	99	71-137	4	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
566-IV-F/F-SS-007	**Sample**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 00:34**	**140224S13**
566-IV-F/F-SS-007	**Matrix Spike**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 10:53**	**140224S13**
566-IV-F/F-SS-007	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**02/24/14**	**02/26/14 11:12**	**140224S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	100.8	101	99.54	100	50-135	1	0-25	
Aroclor-1260	ND	100.0	91.39	91	89.22	89	50-135	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1643-15	**Sample**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 16:25**	**140225S01**
14-02-1643-15	**Matrix Spike**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 17:47**	**140225S01**
14-02-1643-15	**Matrix Spike Duplicate**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 18:14**	**140225S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	43.39	87	42.47	85	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	42.06	84	42.77	86	51-135	2	0-29	
Chlorobenzene	ND	50.00	46.49	93	45.78	92	57-123	2	0-20	
1,2-Dibromoethane	ND	50.00	45.71	91	44.89	90	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	45.73	91	43.94	88	35-131	4	0-25	
1,2-Dichloroethane	ND	50.00	42.78	86	41.74	83	80-120	2	0-20	
1,1-Dichloroethene	ND	50.00	48.59	97	48.17	96	47-143	1	0-25	
Ethylbenzene	ND	50.00	45.99	92	45.42	91	57-129	1	0-22	
Toluene	ND	50.00	45.29	91	44.45	89	63-123	2	0-20	
Trichloroethene	ND	50.00	48.43	97	47.84	96	44-158	1	0-20	
Vinyl Chloride	ND	50.00	50.87	102	53.65	107	49-139	5	0-47	
p/m-Xylene	ND	100.0	91.24	91	89.81	90	70-130	2	0-30	
o-Xylene	ND	50.00	46.27	93	45.82	92	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	44.39	89	44.26	89	57-123	0	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
566-IV-F/F-SS-003	**Sample**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 13:10**	**140225S01**
566-IV-F/F-SS-003	**Matrix Spike**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 13:36**	**140225S01**
566-IV-F/F-SS-003	**Matrix Spike Duplicate**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 14:02**	**140225S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	49.59	99	51.55	103	61-127	4	0-20	
Carbon Tetrachloride	ND	50.00	43.58	87	42.86	86	51-135	2	0-29	
Chlorobenzene	ND	50.00	51.22	102	50.36	101	57-123	2	0-20	
1,2-Dibromoethane	ND	50.00	51.26	103	52.49	105	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	49.07	98	47.96	96	35-131	2	0-25	
1,2-Dichloroethane	ND	50.00	42.71	85	44.29	89	80-120	4	0-20	
1,1-Dichloroethene	ND	50.00	44.66	89	45.73	91	47-143	2	0-25	
Ethylbenzene	ND	50.00	48.32	97	46.90	94	57-129	3	0-22	
Toluene	ND	50.00	48.43	97	49.80	100	63-123	3	0-20	
Trichloroethene	ND	50.00	46.99	94	48.90	98	44-158	4	0-20	
Vinyl Chloride	ND	50.00	50.22	100	53.30	107	49-139	6	0-47	
p/m-Xylene	ND	100.0	100.2	100	97.47	97	70-130	3	0-30	
o-Xylene	ND	50.00	52.17	104	50.33	101	70-130	4	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	45.11	90	47.42	95	57-123	5	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-787	**LCS**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 14:14**	**140225B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	385.1	96	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18065	**LCS**	**Solid**	**ICP 7300**	**02/24/14**	**02/25/14 14:30**	**140224L08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.22	97	80-120	73-127	
Arsenic	25.00	24.27	97	80-120	73-127	
Barium	25.00	25.49	102	80-120	73-127	
Beryllium	25.00	24.84	99	80-120	73-127	
Cadmium	25.00	26.00	104	80-120	73-127	
Chromium	25.00	26.14	105	80-120	73-127	
Cobalt	25.00	28.30	113	80-120	73-127	
Copper	25.00	26.19	105	80-120	73-127	
Lead	25.00	26.35	105	80-120	73-127	
Molybdenum	25.00	25.35	101	80-120	73-127	
Nickel	25.00	27.36	109	80-120	73-127	
Selenium	25.00	23.44	94	80-120	73-127	
Silver	12.50	13.39	107	80-120	73-127	
Thallium	25.00	26.52	106	80-120	73-127	
Vanadium	25.00	24.88	100	80-120	73-127	
Zinc	25.00	25.66	103	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-48	**LCS**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 11:31**	**140225L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8164	98	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-203	**LCS**	**Solid**	**GC 31**	**02/24/14**	**02/25/14 22:58**	**140224L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	90.01	90	50-135	
Aroclor-1260	100.0	82.58	83	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8201	**LCS**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 14:33**	**140225L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	48.09	96	78-120	71-127	
Carbon Tetrachloride	50.00	49.20	98	49-139	34-154	
Chlorobenzene	50.00	51.42	103	79-120	72-127	
1,2-Dibromoethane	50.00	49.38	99	80-120	73-127	
1,2-Dichlorobenzene	50.00	51.94	104	75-120	68-128	
1,2-Dichloroethane	50.00	48.29	97	80-120	73-127	
1,1-Dichloroethene	50.00	53.28	107	74-122	66-130	
Ethylbenzene	50.00	50.56	101	76-120	69-127	
Toluene	50.00	49.44	99	77-120	70-127	
Trichloroethene	50.00	54.53	109	80-120	73-127	
Vinyl Chloride	50.00	56.14	112	68-122	59-131	
p/m-Xylene	100.0	100.4	100	75-125	67-133	
o-Xylene	50.00	51.43	103	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	48.77	98	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1641
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8198	**LCS**	**Solid**	**GC/MS UU**	**02/25/14**	**02/25/14 10:09**	**140225L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	51.63	103	78-120	71-127	
Carbon Tetrachloride	50.00	45.14	90	49-139	34-154	
Chlorobenzene	50.00	54.00	108	79-120	72-127	
1,2-Dibromoethane	50.00	52.94	106	80-120	73-127	
1,2-Dichlorobenzene	50.00	55.11	110	75-120	68-128	
1,2-Dichloroethane	50.00	42.59	85	80-120	73-127	
1,1-Dichloroethene	50.00	46.04	92	74-122	66-130	
Ethylbenzene	50.00	53.36	107	76-120	69-127	
Toluene	50.00	51.44	103	77-120	70-127	
Trichloroethene	50.00	48.26	97	80-120	73-127	
Vinyl Chloride	50.00	54.24	108	68-122	59-131	
p/m-Xylene	100.0	111.7	112	75-125	67-133	
o-Xylene	50.00	57.15	114	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	47.17	94	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-02-1641

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	608	GC/MS UU	2
EPA 8260B	EPA 5030C	823	GC/MS BB	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-02-1641 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 27408

PROJECT NAME: Former Pechiney Cast Plate Inc facility			DATE: 2/24/14 PAGE 1 OF 2
PROJECT NUMBER: 01060270030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L-Conlan	LABORATORY ADDRESS:		14-02-1641
TURNAROUND TIME: Rush			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 714 895 5494		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	TPHcc EPA 8015M	VOCs EPA 8260B	Metals EPA 6010/7470	PCBs EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2/24/14	1127	566-IV-F/F-SS-003	X	X	X	X	4oz jar	S		—	✓		1	
2		1129	566-IV-F/F-SS-004	X	X	X	X		S		—	✓		1	
3		1130	566-IV-F/F-SS-005	X	X	X	X		S		—	✓		1	
4		1131	566-IV-F/F-SS-006	X	X	X	X		S		—	✓		1	
5		1132	566-IV-F/F-SS-007	X	X	X	X		S		—	✓		1	
6		1133	566-IV-F/F-SS-008	X	X	X	X		S		—	✓		1	
7		1135	566-IV-F/F-SS-009	X	X	X	X		S		—	✓		1	
8		1245	562-IV-F/F-SS-001	X	X	X	X		S		—	✓		1	
9		1247	562-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	
10		1248	562-IV-F/F-SS-003	X	X	X	X		S		—	✓		1	
11		1249	562-IV-F/F-SS-004	X	X	X	X		S		—	✓		1	
12		1250	562-IV-F/F-SS-005	X	X	X	X		S		—	✓		1	
13		1252	562-IV-F/F-SS-006	X	X	X	X		S		—	✓		1	
14		1253	562-IV-F/F-SS-007	X	X	X	X		S		—	✓		1	
15		1254	562-IV-F/F-SS-008	X	X	X	X		S		—	✓		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	2/24/14	1530	SIGNATURE:	2/24/14	1530
PRINTED NAME: Jorge Perez			PRINTED NAME: RUDY HIGA		
COMPANY: Amec			COMPANY: CEL		
SIGNATURE:	2/24/14	1730	SIGNATURE:	2/24/14	1730
PRINTED NAME: RUDY HIGA			PRINTED NAME: DANNY LE		
COMPANY: CEL			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS: on COC# 25728

QCTB-022414 pertains to samples on COC # 27408 and 25727

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB25727

PROJECT NAME: Former Pechiney Cast Plate Inc Facility		DATE:	PAGE 2 OF 2
PROJECT NUMBER: 01067070030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		1641
TURNAROUND TIME: Rush			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 714 895 5494		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	TPHcc 8015M	VOCs EPA 8260B	Metals EPA 6010/7000	PCBs EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	2/24/14	1256	563-IV-F/F-SS-009	X	X	X	X	4 oz jar	S		—	✓		1	
17		1303	563-IV-F/F-SS-001	X	X	X	X		S		—	✓		1	
18		1305	563-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	
19		1306	563-IV-F/F-SS-003	X	X	X	X		S		—	✓		1	
20		1307	563-IV-F/F-SS-004	X	X	X	X		S		—	✓		1	

VR 2/24/14

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Jorge Perez COMPANY: Amec	2/24/14	1530	SIGNATURE: [signature] PRINTED NAME: RUDY HIGA COMPANY: CEL	2/24/14	1530
SIGNATURE: [signature] PRINTED NAME: RUDY HIGA COMPANY: CEL	2/24/14	1730	SIGNATURE: [signature] PRINTED NAME: DANNY CZ COMPANY: CEL	2/24/14	17:30
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 5

SAMPLING COMMENTS: see notes (on page 1 of 2)

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02-1 6 4 1

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 02/24/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-02-1642

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 02/26/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-02-1642

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/24/14. They were assigned to Work Order 14-02-1642.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	02/24/14 17:30
		Number of Containers:	14
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
563-IV-F/F-SS-007	14-02-1642-1	02/24/14 13:10	1	Solid
563-IV-F/F-SS-008	14-02-1642-2	02/24/14 13:13	1	Solid
563-IV-F/F-SS-009	14-02-1642-3	02/24/14 13:14	1	Solid
564-IV-F/F-SS-001	14-02-1642-4	02/24/14 13:21	1	Solid
564-IV-F/F-SS-002	14-02-1642-5	02/24/14 13:22	1	Solid
564-IV-F/F-SS-003	14-02-1642-6	02/24/14 13:23	1	Solid
564-IV-F/F-SS-004	14-02-1642-7	02/24/14 13:25	1	Solid
564-IV-F/F-SS-005	14-02-1642-8	02/24/14 13:26	1	Solid
564-IV-F/F-SS-006	14-02-1642-9	02/24/14 13:27	1	Solid
564-IV-F/F-SS-007	14-02-1642-10	02/24/14 13:28	1	Solid
564-IV-F/F-SS-008	14-02-1642-11	02/24/14 13:30	1	Solid
564-IV-F/F-SS-009	14-02-1642-12	02/24/14 13:31	1	Solid
563-IV-F/F-SS-005	14-02-1642-13	02/24/14 13:08	1	Solid
563-IV-F/F-SS-006	14-02-1642-14	02/24/14 13:09	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 1 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
563-IV-F/F-SS-007 (14-02-1642-1)						
Arsenic	1.93		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	142		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.552		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.0		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.5		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	11.2		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	6.04		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.3		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	41.9		1.01	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 2 of 10

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
563-IV-F/F-SS-008 (14-02-1642-2)						
Arsenic	1.90		0.789	mg/kg	EPA 6010B	EPA 3050B
Barium	94.4		0.526	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.309		0.263	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.9		0.263	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.90		0.263	mg/kg	EPA 6010B	EPA 3050B
Copper	10.6		0.526	mg/kg	EPA 6010B	EPA 3050B
Lead	2.40		0.526	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.11		0.263	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.7		0.263	mg/kg	EPA 6010B	EPA 3050B
Zinc	42.8		1.05	mg/kg	EPA 6010B	EPA 3050B
C9-C10	3000		240	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	380		240	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	450		240	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	1200		240	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	2700		240	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	3000		240	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	2100		240	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	1700		240	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	2000		240	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	2100		240	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	1500		240	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	1900		240	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	1000		240	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	23000		240	mg/kg	EPA 8015B (M)	EPA 3550B
n-Butylbenzene	4500		2400	ug/kg	EPA 8260B	EPA 5030C
sec-Butylbenzene	3700		2400	ug/kg	EPA 8260B	EPA 5030C
p-Isopropyltoluene	3400		2400	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	12000		2400	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	5200		2400	ug/kg	EPA 8260B	EPA 5030C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 3 of 10

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
563-IV-F/F-SS-009 (14-02-1642-3)						
Arsenic	1.92		0.781	mg/kg	EPA 6010B	EPA 3050B
Barium	106		0.521	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.360		0.260	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.1		0.260	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.28		0.260	mg/kg	EPA 6010B	EPA 3050B
Copper	15.0		0.521	mg/kg	EPA 6010B	EPA 3050B
Lead	12.4		0.521	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.8		0.260	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.1		0.260	mg/kg	EPA 6010B	EPA 3050B
Zinc	55.0		1.04	mg/kg	EPA 6010B	EPA 3050B
C9-C10	64		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	37		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	31		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	31		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	39		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	68		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	66		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	81		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	48		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	500		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	290		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 4 of 10

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
564-IV-F/F-SS-001 (14-02-1642-4)						
Arsenic	2.19		0.785	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.524	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.428		0.262	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.6		0.262	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.3		0.262	mg/kg	EPA 6010B	EPA 3050B
Copper	12.6		0.524	mg/kg	EPA 6010B	EPA 3050B
Lead	3.61		0.524	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.3		0.262	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.5		0.262	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.1		1.05	mg/kg	EPA 6010B	EPA 3050B
C9-C10	82		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	43		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	66		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	66		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	100		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	200		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	110		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	140		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	74		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	230		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	140		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	260		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	160		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1700		25	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 5 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
564-IV-F/F-SS-002 (14-02-1642-5)						
Arsenic	1.07		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	123		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.522		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.9		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.22		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	12.1		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	10.2		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.1		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.8		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	44.9		1.02	mg/kg	EPA 6010B	EPA 3050B
C29-C32	51		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	91		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	280		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	220		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	680		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	76		50	ug/kg	EPA 8082	EPA 3540C
564-IV-F/F-SS-003 (14-02-1642-6)						
Arsenic	1.42		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	97.7		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.336		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.7		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.45		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	11.7		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	1.52		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.92		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.3		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	45.1		1.02	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 6 of 10

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
564-IV-F/F-SS-004 (14-02-1642-7)						
Barium	85.9		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.321		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	9.69		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.79		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	8.65		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	10.7		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.30		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	21.4		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	37.5		0.990	mg/kg	EPA 6010B	EPA 3050B
C9-C10	52		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	29		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	29		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	36		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	51		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	88		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	62		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	67		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	65		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	78		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	75		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	94		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	68		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	790		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
sec-Butylbenzene	5.3		5.0	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	24		5.0	ug/kg	EPA 8260B	EPA 5030C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 7 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
564-IV-F/F-SS-005 (14-02-1642-8)						
Arsenic	0.936		0.781	mg/kg	EPA 6010B	EPA 3050B
Barium	130		0.521	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.372		0.260	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.3		0.260	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.2		0.260	mg/kg	EPA 6010B	EPA 3050B
Copper	15.6		0.521	mg/kg	EPA 6010B	EPA 3050B
Lead	3.00		0.521	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.5		0.260	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.0		0.260	mg/kg	EPA 6010B	EPA 3050B
Zinc	52.6		1.04	mg/kg	EPA 6010B	EPA 3050B
C6-C44 Total	17		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
Acetone	140		120	ug/kg	EPA 8260B	EPA 5030C
564-IV-F/F-SS-006 (14-02-1642-9)						
Arsenic	0.879		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	104		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.343		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.7		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.92		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	11.5		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	1.85		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.65		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.7		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	42.7		0.985	mg/kg	EPA 6010B	EPA 3050B
C9-C10	8.6		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	9.3		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	17		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	13		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	14		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	17		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	14		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	18		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	24		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	30		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	170		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	360		50	ug/kg	EPA 8082	EPA 3540C
1,2,4-Trimethylbenzene	9.6		5.0	ug/kg	EPA 8260B	EPA 5030C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 8 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
564-IV-F/F-SS-007 (14-02-1642-10)						
Arsenic	1.74		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	106		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.352		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.20		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	10.9		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	2.22		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.86		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	43.3		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0955		0.0833	mg/kg	EPA 7471A	EPA 7471A Total
564-IV-F/F-SS-008 (14-02-1642-11)						
Arsenic	1.15		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	131		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.500		0.251	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.1		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.6		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	11.5		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	14.0		0.503	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.0		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.5		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	42.5		1.01	mg/kg	EPA 6010B	EPA 3050B
C9-C10	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	7.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	9.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	29		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	55		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	37		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	44		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	42		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	62		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	100		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	150		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	120		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	690		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	55		50	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 9 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
564-IV-F/F-SS-009 (14-02-1642-12)						
Arsenic	1.12		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	124		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.446		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.1		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.91		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	12.2		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	11.2		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.9		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.2		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	46.7		0.990	mg/kg	EPA 6010B	EPA 3050B
C13-C14	9.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	27		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	49		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	42		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	40		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	41		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	60		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	100		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	140		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	110		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	640		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	67		50	ug/kg	EPA 8082	EPA 3540C
563-IV-F/F-SS-005 (14-02-1642-13)						
Arsenic	0.964		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	118		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.372		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.5		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.37		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	11.1		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	4.35		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.2		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.3		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	43.3		0.990	mg/kg	EPA 6010B	EPA 3050B
C11-C12	7.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	6.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1642
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	02/24/14
Attn:	Linda Conlan		Page 10 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
563-IV-F/F-SS-006 (14-02-1642-14)						
Arsenic	1.46		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	104		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.357		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.7		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.29		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	12.4		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	6.04		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.3		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.6		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	46.9		0.990	mg/kg	EPA 6010B	EPA 3050B
C17-C18	29		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	36		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	35		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	30		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	34		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	56		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	55		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	130		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	130		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	540		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	270		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-007	**14-02-1642-1-A**	**02/24/14 13:10**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 23:07**	**140225B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	114	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-008	**14-02-1642-2-A**	**02/24/14 13:13**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 12:49**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	240	49.0	
C7	ND	240	49.0	
C8	ND	240	49.0	
C9-C10	3000	240	49.0	
C11-C12	380	240	49.0	
C13-C14	450	240	49.0	
C15-C16	1200	240	49.0	
C17-C18	2700	240	49.0	
C19-C20	3000	240	49.0	
C21-C22	2100	240	49.0	
C23-C24	1700	240	49.0	
C25-C28	2000	240	49.0	
C29-C32	2100	240	49.0	
C33-C36	1500	240	49.0	
C37-C40	1900	240	49.0	
C41-C44	1000	240	49.0	
C6-C44 Total	23000	240	49.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	117	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-009	**14-02-1642-3-A**	**02/24/14 13:14**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 12:34**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	64	25	5.00	
C11-C12	ND	25	5.00	
C13-C14	ND	25	5.00	
C15-C16	ND	25	5.00	
C17-C18	ND	25	5.00	
C19-C20	37	25	5.00	
C21-C22	31	25	5.00	
C23-C24	31	25	5.00	
C25-C28	39	25	5.00	
C29-C32	68	25	5.00	
C33-C36	66	25	5.00	
C37-C40	81	25	5.00	
C41-C44	48	25	5.00	
C6-C44 Total	500	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-001	**14-02-1642-4-A**	**02/24/14 13:21**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 13:05**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	4.95	
C7	ND	25	4.95	
C8	ND	25	4.95	
C9-C10	82	25	4.95	
C11-C12	43	25	4.95	
C13-C14	66	25	4.95	
C15-C16	66	25	4.95	
C17-C18	100	25	4.95	
C19-C20	200	25	4.95	
C21-C22	110	25	4.95	
C23-C24	140	25	4.95	
C25-C28	74	25	4.95	
C29-C32	230	25	4.95	
C33-C36	140	25	4.95	
C37-C40	260	25	4.95	
C41-C44	160	25	4.95	
C6-C44 Total	1700	25	4.95	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	106	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-002	**14-02-1642-5-A**	**02/24/14 13:22**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 00:10**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	4.95	
C7	ND	25	4.95	
C8	ND	25	4.95	
C9-C10	ND	25	4.95	
C11-C12	ND	25	4.95	
C13-C14	ND	25	4.95	
C15-C16	ND	25	4.95	
C17-C18	ND	25	4.95	
C19-C20	ND	25	4.95	
C21-C22	ND	25	4.95	
C23-C24	ND	25	4.95	
C25-C28	ND	25	4.95	
C29-C32	51	25	4.95	
C33-C36	91	25	4.95	
C37-C40	280	25	4.95	
C41-C44	220	25	4.95	
C6-C44 Total	680	25	4.95	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	117	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-003	**14-02-1642-6-A**	**02/24/14 13:23**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 11:32**	**140225B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-004	**14-02-1642-7-A**	**02/24/14 13:25**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 00:41**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	52	5.0	1.00	
C11-C12	29	5.0	1.00	
C13-C14	29	5.0	1.00	
C15-C16	36	5.0	1.00	
C17-C18	51	5.0	1.00	
C19-C20	88	5.0	1.00	
C21-C22	62	5.0	1.00	
C23-C24	67	5.0	1.00	
C25-C28	65	5.0	1.00	
C29-C32	78	5.0	1.00	
C33-C36	75	5.0	1.00	
C37-C40	94	5.0	1.00	
C41-C44	68	5.0	1.00	
C6-C44 Total	790	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-005	**14-02-1642-8-A**	**02/24/14 13:26**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 11:47**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	17	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-006	**14-02-1642-9-A**	**02/24/14 13:27**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 01:13**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	8.6	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	9.3	4.9	0.980	
C19-C20	17	4.9	0.980	
C21-C22	13	4.9	0.980	
C23-C24	14	4.9	0.980	
C25-C28	17	4.9	0.980	
C29-C32	14	4.9	0.980	
C33-C36	18	4.9	0.980	
C37-C40	24	4.9	0.980	
C41-C44	30	4.9	0.980	
C6-C44 Total	170	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	114	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-007	**14-02-1642-10-A**	**02/24/14 13:28**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 12:03**	**140225B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 11 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-008	**14-02-1642-11-A**	**02/24/14 13:30**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 02:00**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	13	5.0	0.990	
C11-C12	7.5	5.0	0.990	
C13-C14	9.0	5.0	0.990	
C15-C16	17	5.0	0.990	
C17-C18	29	5.0	0.990	
C19-C20	55	5.0	0.990	
C21-C22	37	5.0	0.990	
C23-C24	44	5.0	0.990	
C25-C28	42	5.0	0.990	
C29-C32	62	5.0	0.990	
C33-C36	100	5.0	0.990	
C37-C40	150	5.0	0.990	
C41-C44	120	5.0	0.990	
C6-C44 Total	690	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 12 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-009	**14-02-1642-12-A**	**02/24/14 13:31**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 02:15**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	9.0	5.0	1.00	
C15-C16	13	5.0	1.00	
C17-C18	27	5.0	1.00	
C19-C20	49	5.0	1.00	
C21-C22	42	5.0	1.00	
C23-C24	40	5.0	1.00	
C25-C28	41	5.0	1.00	
C29-C32	60	5.0	1.00	
C33-C36	100	5.0	1.00	
C37-C40	140	5.0	1.00	
C41-C44	110	5.0	1.00	
C6-C44 Total	640	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 13 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-005	**14-02-1642-13-A**	**02/24/14 13:08**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 12:18**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	7.1	5.0	1.00	
C13-C14	6.6	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	24	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 14 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-006	**14-02-1642-14-A**	**02/24/14 13:09**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 02:47**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	4.95	
C7	ND	25	4.95	
C8	ND	25	4.95	
C9-C10	ND	25	4.95	
C11-C12	ND	25	4.95	
C13-C14	ND	25	4.95	
C15-C16	ND	25	4.95	
C17-C18	29	25	4.95	
C19-C20	36	25	4.95	
C21-C22	35	25	4.95	
C23-C24	30	25	4.95	
C25-C28	34	25	4.95	
C29-C32	56	25	4.95	
C33-C36	55	25	4.95	
C37-C40	130	25	4.95	
C41-C44	130	25	4.95	
C6-C44 Total	540	25	4.95	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	113	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 15 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-789**	**N/A**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 22:05**	**140225B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-007	**14-02-1642-1-A**	**02/24/14 13:10**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:18**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	1.93	0.758	1.01	
Barium	142	0.505	1.01	
Beryllium	0.552	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	17.0	0.253	1.01	
Cobalt	10.5	0.253	1.01	
Copper	11.2	0.505	1.01	
Lead	6.04	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	12.8	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	38.3	0.253	1.01	
Zinc	41.9	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-008	**14-02-1642-2-A**	**02/24/14 13:13**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:19**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.789	1.05	
Arsenic	1.90	0.789	1.05	
Barium	94.4	0.526	1.05	
Beryllium	0.309	0.263	1.05	
Cadmium	ND	0.526	1.05	
Chromium	10.9	0.263	1.05	
Cobalt	8.90	0.263	1.05	
Copper	10.6	0.526	1.05	
Lead	2.40	0.526	1.05	
Molybdenum	ND	0.263	1.05	
Nickel	9.11	0.263	1.05	
Selenium	ND	0.789	1.05	
Silver	ND	0.263	1.05	
Thallium	ND	0.789	1.05	
Vanadium	28.7	0.263	1.05	
Zinc	42.8	1.05	1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-009	**14-02-1642-3-A**	**02/24/14 13:14**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:24**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	1.92	0.781	1.04	
Barium	106	0.521	1.04	
Beryllium	0.360	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	13.1	0.260	1.04	
Cobalt	9.28	0.260	1.04	
Copper	15.0	0.521	1.04	
Lead	12.4	0.521	1.04	
Molybdenum	ND	0.260	1.04	
Nickel	10.8	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	31.1	0.260	1.04	
Zinc	55.0	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-001	**14-02-1642-4-A**	**02/24/14 13:21**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:25**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.785	1.05	
Arsenic	2.19	0.785	1.05	
Barium	129	0.524	1.05	
Beryllium	0.428	0.262	1.05	
Cadmium	ND	0.524	1.05	
Chromium	15.6	0.262	1.05	
Cobalt	11.3	0.262	1.05	
Copper	12.6	0.524	1.05	
Lead	3.61	0.524	1.05	
Molybdenum	ND	0.262	1.05	
Nickel	12.3	0.262	1.05	
Selenium	ND	0.785	1.05	
Silver	ND	0.262	1.05	
Thallium	ND	0.785	1.05	
Vanadium	35.5	0.262	1.05	
Zinc	48.1	1.05	1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-002	**14-02-1642-5-A**	**02/24/14 13:22**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:26**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	1.07	0.761	1.02	
Barium	123	0.508	1.02	
Beryllium	0.522	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	16.9	0.254	1.02	
Cobalt	9.22	0.254	1.02	
Copper	12.1	0.508	1.02	
Lead	10.2	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	12.1	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	35.8	0.254	1.02	
Zinc	44.9	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-003	**14-02-1642-6-A**	**02/24/14 13:23**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:27**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	1.42	0.761	1.02	
Barium	97.7	0.508	1.02	
Beryllium	0.336	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	11.7	0.254	1.02	
Cobalt	9.45	0.254	1.02	
Copper	11.7	0.508	1.02	
Lead	1.52	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	9.92	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	31.3	0.254	1.02	
Zinc	45.1	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-004	**14-02-1642-7-A**	**02/24/14 13:25**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:28**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	ND	0.743	0.990	
Barium	85.9	0.495	0.990	
Beryllium	0.321	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	9.69	0.248	0.990	
Cobalt	6.79	0.248	0.990	
Copper	8.65	0.495	0.990	
Lead	10.7	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	7.30	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	21.4	0.248	0.990	
Zinc	37.5	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-005	**14-02-1642-8-A**	**02/24/14 13:26**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:29**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	0.936	0.781	1.04	
Barium	130	0.521	1.04	
Beryllium	0.372	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	15.3	0.260	1.04	
Cobalt	11.2	0.260	1.04	
Copper	15.6	0.521	1.04	
Lead	3.00	0.521	1.04	
Molybdenum	ND	0.260	1.04	
Nickel	12.5	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	35.0	0.260	1.04	
Zinc	52.6	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-006	**14-02-1642-9-A**	**02/24/14 13:27**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:30**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	0.879	0.739	0.985	
Barium	104	0.493	0.985	
Beryllium	0.343	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	11.7	0.246	0.985	
Cobalt	8.92	0.246	0.985	
Copper	11.5	0.493	0.985	
Lead	1.85	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	9.65	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	28.7	0.246	0.985	
Zinc	42.7	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-007	**14-02-1642-10-A**	**02/24/14 13:28**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:31**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.74	0.750	1.00	
Barium	106	0.500	1.00	
Beryllium	0.352	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	11.9	0.250	1.00	
Cobalt	9.20	0.250	1.00	
Copper	10.9	0.500	1.00	
Lead	2.22	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	9.86	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	29.7	0.250	1.00	
Zinc	43.3	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 11 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-008	**14-02-1642-11-A**	**02/24/14 13:30**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:32**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	1.15	0.754	1.01	
Barium	131	0.503	1.01	
Beryllium	0.500	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	16.1	0.251	1.01	
Cobalt	10.6	0.251	1.01	
Copper	11.5	0.503	1.01	
Lead	14.0	0.503	1.01	
Molybdenum	ND	0.251	1.01	
Nickel	12.0	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	35.5	0.251	1.01	
Zinc	42.5	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 12 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-009	**14-02-1642-12-A**	**02/24/14 13:31**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:33**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	1.12	0.743	0.990	
Barium	124	0.495	0.990	
Beryllium	0.446	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	14.1	0.248	0.990	
Cobalt	9.91	0.248	0.990	
Copper	12.2	0.495	0.990	
Lead	11.2	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	10.9	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	33.2	0.248	0.990	
Zinc	46.7	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 13 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-005	**14-02-1642-13-A**	**02/24/14 13:08**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:38**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	0.964	0.743	0.990	
Barium	118	0.495	0.990	
Beryllium	0.372	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	12.5	0.248	0.990	
Cobalt	9.37	0.248	0.990	
Copper	11.1	0.495	0.990	
Lead	4.35	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	10.2	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	31.3	0.248	0.990	
Zinc	43.3	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 14 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-006	**14-02-1642-14-A**	**02/24/14 13:09**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:39**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	1.46	0.743	0.990	
Barium	104	0.495	0.990	
Beryllium	0.357	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	12.7	0.248	0.990	
Cobalt	9.29	0.248	0.990	
Copper	12.4	0.495	0.990	
Lead	6.04	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	10.3	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	30.6	0.248	0.990	
Zinc	46.9	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 15 of 15

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18066**	**N/A**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 14:10**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-007	**14-02-1642-1-A**	**02/24/14 13:10**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:42**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

563-IV-F/F-SS-008	**14-02-1642-2-A**	**02/24/14 13:13**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:44**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

563-IV-F/F-SS-009	**14-02-1642-3-A**	**02/24/14 13:14**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:47**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

564-IV-F/F-SS-001	**14-02-1642-4-A**	**02/24/14 13:21**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:49**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

564-IV-F/F-SS-002	**14-02-1642-5-A**	**02/24/14 13:22**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:51**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

564-IV-F/F-SS-003	**14-02-1642-6-A**	**02/24/14 13:23**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:53**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

564-IV-F/F-SS-004	**14-02-1642-7-A**	**02/24/14 13:25**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:56**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

564-IV-F/F-SS-005	**14-02-1642-8-A**	**02/24/14 13:26**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:58**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-006	**14-02-1642-9-A**	**02/24/14 13:27**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:00**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0909	1.00	

564-IV-F/F-SS-007	**14-02-1642-10-A**	**02/24/14 13:28**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:07**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0955	0.0833	1.00	

564-IV-F/F-SS-008	**14-02-1642-11-A**	**02/24/14 13:30**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:14**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

564-IV-F/F-SS-009	**14-02-1642-12-A**	**02/24/14 13:31**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:16**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

563-IV-F/F-SS-005	**14-02-1642-13-A**	**02/24/14 13:08**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:18**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

563-IV-F/F-SS-006	**14-02-1642-14-A**	**02/24/14 13:09**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:20**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Method Blank	**099-16-272-50**	**N/A**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:33**	**140225L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-007	**14-02-1642-1-A**	**02/24/14 13:10**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 05:00**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

563-IV-F/F-SS-008	**14-02-1642-2-A**	**02/24/14 13:13**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 09:09**	**140224L14**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-009	**14-02-1642-3-A**	**02/24/14 13:14**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 05:17**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	290	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

564-IV-F/F-SS-001	**14-02-1642-4-A**	**02/24/14 13:21**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 05:35**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-002	**14-02-1642-5-A**	**02/24/14 13:22**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 05:53**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	76	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

564-IV-F/F-SS-003	**14-02-1642-6-A**	**02/24/14 13:23**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 06:11**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-004	**14-02-1642-7-A**	**02/24/14 13:25**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 06:29**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

564-IV-F/F-SS-005	**14-02-1642-8-A**	**02/24/14 13:26**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 06:47**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-006	**14-02-1642-9-A**	**02/24/14 13:27**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 07:04**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	360	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

564-IV-F/F-SS-007	**14-02-1642-10-A**	**02/24/14 13:28**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 07:22**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-008	**14-02-1642-11-A**	**02/24/14 13:30**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 07:40**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	55	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

564-IV-F/F-SS-009	**14-02-1642-12-A**	**02/24/14 13:31**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 07:58**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	67	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-005	**14-02-1642-13-A**	**02/24/14 13:08**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 08:33**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

563-IV-F/F-SS-006	**14-02-1642-14-A**	**02/24/14 13:09**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 08:51**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	270	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-202**	**N/A**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 04:06**	**140224L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-007	**14-02-1642-1-A**	**02/24/14 13:10**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 15:48**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-008	**14-02-1642-2-A**	**02/24/14 13:13**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 21:00**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	60000	501	
Benzene	ND	2400	501	
Bromobenzene	ND	2400	501	
Bromochloromethane	ND	2400	501	
Bromodichloromethane	ND	2400	501	
Bromoform	ND	2400	501	
Bromomethane	ND	12000	501	
2-Butanone	ND	24000	501	
n-Butylbenzene	4500	2400	501	
sec-Butylbenzene	3700	2400	501	
tert-Butylbenzene	ND	2400	501	
Carbon Disulfide	ND	24000	501	
Carbon Tetrachloride	ND	2400	501	
Chlorobenzene	ND	2400	501	
Chloroethane	ND	2400	501	
Chloroform	ND	2400	501	
Chloromethane	ND	12000	501	
2-Chlorotoluene	ND	2400	501	
4-Chlorotoluene	ND	2400	501	
Dibromochloromethane	ND	2400	501	
1,2-Dibromo-3-Chloropropane	ND	4800	501	
1,2-Dibromoethane	ND	2400	501	
Dibromomethane	ND	2400	501	
1,2-Dichlorobenzene	ND	2400	501	
1,3-Dichlorobenzene	ND	2400	501	
1,4-Dichlorobenzene	ND	2400	501	
Dichlorodifluoromethane	ND	2400	501	
1,1-Dichloroethane	ND	2400	501	
1,2-Dichloroethane	ND	2400	501	
1,1-Dichloroethene	ND	2400	501	
c-1,2-Dichloroethene	ND	2400	501	
t-1,2-Dichloroethene	ND	2400	501	
1,2-Dichloropropane	ND	2400	501	
1,3-Dichloropropane	ND	2400	501	
2,2-Dichloropropane	ND	2400	501	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2400	501	
c-1,3-Dichloropropene	ND	2400	501	
t-1,3-Dichloropropene	ND	2400	501	
Ethylbenzene	ND	2400	501	
2-Hexanone	ND	24000	501	
Isopropylbenzene	ND	2400	501	
p-Isopropyltoluene	3400	2400	501	
Methylene Chloride	ND	24000	501	
4-Methyl-2-Pentanone	ND	24000	501	
Naphthalene	ND	24000	501	
n-Propylbenzene	ND	2400	501	
Styrene	ND	2400	501	
1,1,1,2-Tetrachloroethane	ND	2400	501	
1,1,2,2-Tetrachloroethane	ND	2400	501	
Tetrachloroethene	ND	2400	501	
Toluene	ND	2400	501	
1,2,3-Trichlorobenzene	ND	4800	501	
1,2,4-Trichlorobenzene	ND	2400	501	
1,1,1-Trichloroethane	ND	2400	501	
1,1,2-Trichloroethane	ND	2400	501	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	24000	501	
Trichloroethene	ND	2400	501	
1,2,3-Trichloropropane	ND	2400	501	
1,2,4-Trimethylbenzene	12000	2400	501	
Trichlorofluoromethane	ND	24000	501	
1,3,5-Trimethylbenzene	5200	2400	501	
Vinyl Acetate	ND	24000	501	
Vinyl Chloride	ND	2400	501	
p/m-Xylene	ND	2400	501	
o-Xylene	ND	2400	501	
Methyl-t-Butyl Ether (MTBE)	ND	2400	501	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	91	60-132	
Dibromofluoromethane	94	63-141	
1,2-Dichloroethane-d4	88	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-009	**14-02-1642-3-A**	**02/24/14 13:14**	**Solid**	**GC/MS Z**	**02/25/14**	**02/26/14 12:40**	**140226L02**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	25000	200	
Benzene	ND	1000	200	
Bromobenzene	ND	1000	200	
Bromochloromethane	ND	1000	200	
Bromodichloromethane	ND	1000	200	
Bromoform	ND	1000	200	
Bromomethane	ND	5000	200	
2-Butanone	ND	10000	200	
n-Butylbenzene	ND	1000	200	
sec-Butylbenzene	ND	1000	200	
tert-Butylbenzene	ND	1000	200	
Carbon Disulfide	ND	10000	200	
Carbon Tetrachloride	ND	1000	200	
Chlorobenzene	ND	1000	200	
Chloroethane	ND	1000	200	
Chloroform	ND	1000	200	
Chloromethane	ND	5000	200	
2-Chlorotoluene	ND	1000	200	
4-Chlorotoluene	ND	1000	200	
Dibromochloromethane	ND	1000	200	
1,2-Dibromo-3-Chloropropane	ND	2000	200	
1,2-Dibromoethane	ND	1000	200	
Dibromomethane	ND	1000	200	
1,2-Dichlorobenzene	ND	1000	200	
1,3-Dichlorobenzene	ND	1000	200	
1,4-Dichlorobenzene	ND	1000	200	
Dichlorodifluoromethane	ND	1000	200	
1,1-Dichloroethane	ND	1000	200	
1,2-Dichloroethane	ND	1000	200	
1,1-Dichloroethene	ND	1000	200	
c-1,2-Dichloroethene	ND	1000	200	
t-1,2-Dichloroethene	ND	1000	200	
1,2-Dichloropropane	ND	1000	200	
1,3-Dichloropropane	ND	1000	200	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
2,2-Dichloropropane	ND	1000	200	
1,1-Dichloropropene	ND	1000	200	
c-1,3-Dichloropropene	ND	1000	200	
t-1,3-Dichloropropene	ND	1000	200	
Ethylbenzene	ND	1000	200	
2-Hexanone	ND	10000	200	
Isopropylbenzene	ND	1000	200	
p-Isopropyltoluene	ND	1000	200	
Methylene Chloride	ND	10000	200	
4-Methyl-2-Pentanone	ND	10000	200	
Naphthalene	ND	10000	200	
n-Propylbenzene	ND	1000	200	
Styrene	ND	1000	200	
1,1,1,2-Tetrachloroethane	ND	1000	200	
1,1,2,2-Tetrachloroethane	ND	1000	200	
Tetrachloroethene	ND	1000	200	
Toluene	ND	1000	200	
1,2,3-Trichlorobenzene	ND	2000	200	
1,2,4-Trichlorobenzene	ND	1000	200	
1,1,1-Trichloroethane	ND	1000	200	
1,1,2-Trichloroethane	ND	1000	200	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10000	200	
Trichloroethene	ND	1000	200	
1,2,3-Trichloropropane	ND	1000	200	
1,2,4-Trimethylbenzene	ND	1000	200	
Trichlorofluoromethane	ND	10000	200	
1,3,5-Trimethylbenzene	ND	1000	200	
Vinyl Acetate	ND	10000	200	
Vinyl Chloride	ND	1000	200	
p/m-Xylene	ND	1000	200	
o-Xylene	ND	1000	200	
Methyl-t-Butyl Ether (MTBE)	ND	1000	200	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	103	60-132	
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-001	**14-02-1642-4-A**	**02/24/14 13:21**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 16:17**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-002	**14-02-1642-5-A**	**02/24/14 13:22**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 16:45**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 11 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-003	**14-02-1642-6-A**	**02/24/14 13:23**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 13:27**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.7	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 12 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.7	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	60-132	
Dibromofluoromethane	106	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 13 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-004	**14-02-1642-7-A**	**02/24/14 13:25**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 17:13**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	5.3	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 14 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	24	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 15 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-005	**14-02-1642-8-A**	**02/24/14 13:26**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 17:42**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	140	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 16 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	94	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 17 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-006	**14-02-1642-9-A**	**02/24/14 13:27**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 18:10**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 18 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	9.6	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 19 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-007	**14-02-1642-10-A**	**02/24/14 13:28**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 18:38**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 20 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 21 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-008	**14-02-1642-11-A**	**02/24/14 13:30**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 19:07**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 22 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 23 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-009	**14-02-1642-12-A**	**02/24/14 13:31**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 19:35**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.7	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 24 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.7	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 25 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-005	**14-02-1642-13-A**	**02/24/14 13:08**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 20:04**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 26 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	94	63-141	
1,2-Dichloroethane-d4	91	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 27 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-006	**14-02-1642-14-A**	**02/24/14 13:09**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 20:32**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 28 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	94	63-141	
1,2-Dichloroethane-d4	89	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 29 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8200**	**N/A**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 12:58**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	60-132	
Dibromofluoromethane	108	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 31 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8204**	**N/A**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 12:30**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	100	
Benzene	ND	500	100	
Bromobenzene	ND	500	100	
Bromochloromethane	ND	500	100	
Bromodichloromethane	ND	500	100	
Bromoform	ND	500	100	
Bromomethane	ND	2500	100	
2-Butanone	ND	5000	100	
n-Butylbenzene	ND	500	100	
sec-Butylbenzene	ND	500	100	
tert-Butylbenzene	ND	500	100	
Carbon Disulfide	ND	5000	100	
Carbon Tetrachloride	ND	500	100	
Chlorobenzene	ND	500	100	
Chloroethane	ND	500	100	
Chloroform	ND	500	100	
Chloromethane	ND	2500	100	
2-Chlorotoluene	ND	500	100	
4-Chlorotoluene	ND	500	100	
Dibromochloromethane	ND	500	100	
1,2-Dibromo-3-Chloropropane	ND	1000	100	
1,2-Dibromoethane	ND	500	100	
Dibromomethane	ND	500	100	
1,2-Dichlorobenzene	ND	500	100	
1,3-Dichlorobenzene	ND	500	100	
1,4-Dichlorobenzene	ND	500	100	
Dichlorodifluoromethane	ND	500	100	
1,1-Dichloroethane	ND	500	100	
1,2-Dichloroethane	ND	500	100	
1,1-Dichloroethene	ND	500	100	
c-1,2-Dichloroethene	ND	500	100	
t-1,2-Dichloroethene	ND	500	100	
1,2-Dichloropropane	ND	500	100	
1,3-Dichloropropane	ND	500	100	
2,2-Dichloropropane	ND	500	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	100	
c-1,3-Dichloropropene	ND	500	100	
t-1,3-Dichloropropene	ND	500	100	
Ethylbenzene	ND	500	100	
2-Hexanone	ND	5000	100	
Isopropylbenzene	ND	500	100	
p-Isopropyltoluene	ND	500	100	
Methylene Chloride	ND	5000	100	
4-Methyl-2-Pentanone	ND	5000	100	
Naphthalene	ND	5000	100	
n-Propylbenzene	ND	500	100	
Styrene	ND	500	100	
1,1,1,2-Tetrachloroethane	ND	500	100	
1,1,2,2-Tetrachloroethane	ND	500	100	
Tetrachloroethene	ND	500	100	
Toluene	ND	500	100	
1,2,3-Trichlorobenzene	ND	1000	100	
1,2,4-Trichlorobenzene	ND	500	100	
1,1,1-Trichloroethane	ND	500	100	
1,1,2-Trichloroethane	ND	500	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	100	
Trichloroethene	ND	500	100	
1,2,3-Trichloropropane	ND	500	100	
1,2,4-Trimethylbenzene	ND	500	100	
Trichlorofluoromethane	ND	5000	100	
1,3,5-Trimethylbenzene	ND	500	100	
Vinyl Acetate	ND	5000	100	
Vinyl Chloride	ND	500	100	
p/m-Xylene	ND	500	100	
o-Xylene	ND	500	100	
Methyl-t-Butyl Ether (MTBE)	ND	500	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	90	60-132	
Dibromofluoromethane	107	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 33 of 34

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8208**	**N/A**	**Solid**	**GC/MS Z**	**02/26/14**	**02/26/14 11:18**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	100	
Benzene	ND	500	100	
Bromobenzene	ND	500	100	
Bromochloromethane	ND	500	100	
Bromodichloromethane	ND	500	100	
Bromoform	ND	500	100	
Bromomethane	ND	2500	100	
2-Butanone	ND	5000	100	
n-Butylbenzene	ND	500	100	
sec-Butylbenzene	ND	500	100	
tert-Butylbenzene	ND	500	100	
Carbon Disulfide	ND	5000	100	
Carbon Tetrachloride	ND	500	100	
Chlorobenzene	ND	500	100	
Chloroethane	ND	500	100	
Chloroform	ND	500	100	
Chloromethane	ND	2500	100	
2-Chlorotoluene	ND	500	100	
4-Chlorotoluene	ND	500	100	
Dibromochloromethane	ND	500	100	
1,2-Dibromo-3-Chloropropane	ND	1000	100	
1,2-Dibromoethane	ND	500	100	
Dibromomethane	ND	500	100	
1,2-Dichlorobenzene	ND	500	100	
1,3-Dichlorobenzene	ND	500	100	
1,4-Dichlorobenzene	ND	500	100	
Dichlorodifluoromethane	ND	500	100	
1,1-Dichloroethane	ND	500	100	
1,2-Dichloroethane	ND	500	100	
1,1-Dichloroethene	ND	500	100	
c-1,2-Dichloroethene	ND	500	100	
t-1,2-Dichloroethene	ND	500	100	
1,2-Dichloropropane	ND	500	100	
1,3-Dichloropropane	ND	500	100	
2,2-Dichloropropane	ND	500	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1642
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030		Page 34 of 34

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	100	
c-1,3-Dichloropropene	ND	500	100	
t-1,3-Dichloropropene	ND	500	100	
Ethylbenzene	ND	500	100	
2-Hexanone	ND	5000	100	
Isopropylbenzene	ND	500	100	
p-Isopropyltoluene	ND	500	100	
Methylene Chloride	ND	5000	100	
4-Methyl-2-Pentanone	ND	5000	100	
Naphthalene	ND	5000	100	
n-Propylbenzene	ND	500	100	
Styrene	ND	500	100	
1,1,1,2-Tetrachloroethane	ND	500	100	
1,1,2,2-Tetrachloroethane	ND	500	100	
Tetrachloroethene	ND	500	100	
Toluene	ND	500	100	
1,2,3-Trichlorobenzene	ND	1000	100	
1,2,4-Trichlorobenzene	ND	500	100	
1,1,1-Trichloroethane	ND	500	100	
1,1,2-Trichloroethane	ND	500	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	100	
Trichloroethene	ND	500	100	
1,2,3-Trichloropropane	ND	500	100	
1,2,4-Trimethylbenzene	ND	500	100	
Trichlorofluoromethane	ND	5000	100	
1,3,5-Trimethylbenzene	ND	500	100	
Vinyl Acetate	ND	5000	100	
Vinyl Chloride	ND	500	100	
p/m-Xylene	ND	500	100	
o-Xylene	ND	500	100	
Methyl-t-Butyl Ether (MTBE)	ND	500	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	106	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
564-IV-F/F-SS-006	**Sample**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 01:13**	**140225S02**
564-IV-F/F-SS-006	**Matrix Spike**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 22:36**	**140225S02**
564-IV-F/F-SS-006	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 22:52**	**140225S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	182.2	400.0	572.0	97	569.9	97	64-130	0	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
564-IV-F/F-SS-007	**Sample**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:31**	**140225S01**
564-IV-F/F-SS-007	**Matrix Spike**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 14:12**	**140225S01**
564-IV-F/F-SS-007	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 14:13**	**140225S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.614	26	7.363	29	50-115	11	0-20	3
Arsenic	1.736	25.00	27.27	102	26.56	99	75-125	3	0-20	
Barium	105.5	25.00	134.5	4X	123.3	4X	75-125	4X	0-20	Q
Beryllium	0.3523	25.00	27.41	108	27.08	107	75-125	1	0-20	
Cadmium	ND	25.00	26.11	104	25.94	104	75-125	1	0-20	
Chromium	11.93	25.00	38.23	105	37.74	103	75-125	1	0-20	
Cobalt	9.199	25.00	37.21	112	35.60	106	75-125	4	0-20	
Copper	10.86	25.00	38.88	112	37.66	107	75-125	3	0-20	
Lead	2.221	25.00	29.09	107	27.85	103	75-125	4	0-20	
Molybdenum	ND	25.00	25.56	102	24.95	100	75-125	2	0-20	
Nickel	9.864	25.00	36.65	107	35.20	101	75-125	4	0-20	
Selenium	ND	25.00	24.88	100	24.28	97	75-125	2	0-20	
Silver	ND	12.50	13.75	110	13.59	109	75-125	1	0-20	
Thallium	ND	25.00	10.98	44	11.68	47	75-125	6	0-20	3
Vanadium	29.67	25.00	56.79	109	54.98	101	75-125	3	0-20	
Zinc	43.27	25.00	68.63	101	66.92	95	75-125	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
564-IV-F/F-SS-007	**Sample**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:07**	**140225S04**
564-IV-F/F-SS-007	**Matrix Spike**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:09**	**140225S04**
564-IV-F/F-SS-007	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 14:11**	**140225S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.09552	0.8350	0.8627	92	0.8949	96	71-137	4	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
563-IV-F/F-SS-005	**Sample**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 08:33**	**140224S14**
563-IV-F/F-SS-005	**Matrix Spike**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 04:24**	**140224S14**
563-IV-F/F-SS-005	**Matrix Spike Duplicate**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 04:42**	**140224S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	113.3	113	109.0	109	50-135	4	0-25	
Aroclor-1260	ND	100.0	97.56	98	93.20	93	50-135	5	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1727-1	**Sample**	**Solid**	**GC/MS Z**	**02/26/14**	**02/26/14 12:13**	**140226S01**
14-02-1727-1	**Matrix Spike**	**Solid**	**GC/MS Z**	**02/26/14**	**02/26/14 13:07**	**140226S01**
14-02-1727-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS Z**	**02/26/14**	**02/26/14 13:33**	**140226S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	43.30	87	43.70	87	61-127	1	0-20	
Carbon Tetrachloride	ND	50.00	51.62	103	53.44	107	51-135	3	0-29	
Chlorobenzene	ND	50.00	48.79	98	48.68	97	57-123	0	0-20	
1,2-Dibromoethane	ND	50.00	49.14	98	48.78	98	64-124	1	0-20	
1,2-Dichlorobenzene	ND	50.00	49.79	100	50.68	101	35-131	2	0-25	
1,2-Dichloroethane	ND	50.00	47.94	96	47.65	95	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	45.31	91	46.39	93	47-143	2	0-25	
Ethylbenzene	ND	50.00	47.83	96	47.90	96	57-129	0	0-22	
Toluene	ND	50.00	45.13	90	44.33	89	63-123	2	0-20	
Trichloroethene	ND	50.00	47.17	94	47.11	94	44-158	0	0-20	
Vinyl Chloride	ND	50.00	46.81	94	49.12	98	49-139	5	0-47	
p/m-Xylene	ND	100.0	95.80	96	95.73	96	70-130	0	0-30	
o-Xylene	ND	50.00	49.05	98	48.69	97	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	40.24	80	41.43	83	57-123	3	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
564-IV-F/F-SS-003	**Sample**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 13:27**	**140225S01**
564-IV-F/F-SS-003	**Matrix Spike**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 14:23**	**140225S01**
564-IV-F/F-SS-003	**Matrix Spike Duplicate**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 14:52**	**140225S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	46.95	94	47.64	95	61-127	1	0-20	
Carbon Tetrachloride	ND	50.00	42.75	85	43.61	87	51-135	2	0-29	
Chlorobenzene	ND	50.00	49.45	99	50.27	101	57-123	2	0-20	
1,2-Dibromoethane	ND	50.00	48.13	96	48.95	98	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	48.36	97	49.25	98	35-131	2	0-25	
1,2-Dichloroethane	ND	50.00	43.96	88	44.05	88	80-120	0	0-20	
1,1-Dichloroethene	ND	50.00	47.46	95	47.70	95	47-143	0	0-25	
Ethylbenzene	ND	50.00	47.76	96	48.59	97	57-129	2	0-22	
Toluene	ND	50.00	47.36	95	47.75	96	63-123	1	0-20	
Trichloroethene	ND	50.00	47.36	95	48.56	97	44-158	3	0-20	
Vinyl Chloride	ND	50.00	36.02	72	36.29	73	49-139	1	0-47	
p/m-Xylene	ND	100.0	97.47	97	99.00	99	70-130	2	0-30	
o-Xylene	ND	50.00	49.34	99	50.37	101	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	43.33	87	43.81	88	57-123	1	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-789	**LCS**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 22:21**	**140225B02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	369.4	92	75-123	

RPD: Relative Percent Difference. CL: Control Limits

Return to Contents

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18066	**LCS**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 14:11**	**140225L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.50	98	80-120	73-127	
Arsenic	25.00	24.75	99	80-120	73-127	
Barium	25.00	25.38	102	80-120	73-127	
Beryllium	25.00	24.83	99	80-120	73-127	
Cadmium	25.00	26.09	104	80-120	73-127	
Chromium	25.00	25.98	104	80-120	73-127	
Cobalt	25.00	28.21	113	80-120	73-127	
Copper	25.00	26.33	105	80-120	73-127	
Lead	25.00	26.78	107	80-120	73-127	
Molybdenum	25.00	25.55	102	80-120	73-127	
Nickel	25.00	27.28	109	80-120	73-127	
Selenium	25.00	23.61	94	80-120	73-127	
Silver	12.50	13.32	107	80-120	73-127	
Thallium	25.00	26.38	106	80-120	73-127	
Vanadium	25.00	24.86	99	80-120	73-127	
Zinc	25.00	25.75	103	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-50	**LCS**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:40**	**140225L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8727	105	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-202	**LCS**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 03:48**	**140224L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	106.6	107	50-135	
Aroclor-1260	100.0	91.88	92	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8208	**LCS**	**Solid**	**GC/MS Z**	**02/26/14**	**02/26/14 10:22**	**140226L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	47.07	94	78-120	71-127	
Carbon Tetrachloride	50.00	58.98	118	49-139	34-154	
Chlorobenzene	50.00	52.45	105	79-120	72-127	
1,2-Dibromoethane	50.00	49.53	99	80-120	73-127	
1,2-Dichlorobenzene	50.00	54.48	109	75-120	68-128	
1,2-Dichloroethane	50.00	50.74	101	80-120	73-127	
1,1-Dichloroethene	50.00	48.74	97	74-122	66-130	
Ethylbenzene	50.00	51.31	103	76-120	69-127	
Toluene	50.00	48.22	96	77-120	70-127	
Trichloroethene	50.00	49.95	100	80-120	73-127	
Vinyl Chloride	50.00	50.14	100	68-122	59-131	
p/m-Xylene	100.0	102.7	103	75-125	67-133	
o-Xylene	50.00	52.95	106	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	42.09	84	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8200	**LCS**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 11:33**	**140225L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	49.20	98	78-120	71-127	
Carbon Tetrachloride	50.00	44.87	90	49-139	34-154	
Chlorobenzene	50.00	53.73	107	79-120	72-127	
1,2-Dibromoethane	50.00	50.55	101	80-120	73-127	
1,2-Dichlorobenzene	50.00	53.38	107	75-120	68-128	
1,2-Dichloroethane	50.00	45.96	92	80-120	73-127	
1,1-Dichloroethene	50.00	49.90	100	74-122	66-130	
Ethylbenzene	50.00	50.79	102	76-120	69-127	
Toluene	50.00	49.93	100	77-120	70-127	
Trichloroethene	50.00	48.33	97	80-120	73-127	
Vinyl Chloride	50.00	39.89	80	68-122	59-131	
p/m-Xylene	100.0	104.5	105	75-125	67-133	
o-Xylene	50.00	53.26	107	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	45.56	91	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1642
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8204	**LCS**	**Solid**	**GC/MS XX**	**02/25/14**	**02/25/14 11:33**	**140225L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	49.20	98	78-120	71-127	
Carbon Tetrachloride	50.00	44.87	90	49-139	34-154	
Chlorobenzene	50.00	53.73	107	79-120	72-127	
1,2-Dibromoethane	50.00	50.55	101	80-120	73-127	
1,2-Dichlorobenzene	50.00	53.38	107	75-120	68-128	
1,2-Dichloroethane	50.00	45.96	92	80-120	73-127	
1,1-Dichloroethene	50.00	49.90	100	74-122	66-130	
Ethylbenzene	50.00	50.79	102	76-120	69-127	
Toluene	50.00	49.93	100	77-120	70-127	
Trichloroethene	50.00	48.33	97	80-120	73-127	
Vinyl Chloride	50.00	39.89	80	68-122	59-131	
p/m-Xylene	100.0	104.5	105	75-125	67-133	
o-Xylene	50.00	53.26	107	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	45.56	91	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-02-1642

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	914	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 66	1
EPA 8260B	EPA 5030C	796	GC/MS Z	2
EPA 8260B	EPA 5030C	796	GC/MS XX	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-02-1642

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 27406

PROJECT NAME: Former Pechiney Cast Plate, Inc Facility			DATE: 2/24/14 — PAGE 1 OF 1
PROJECT NUMBER: 01060270030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L-Conlan	LABORATORY ADDRESS:		14-02-1642
TURNAROUND TIME: Rush			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 714 895 5494		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	TPHcc EPA 8015M	VOCs EPA 8260B	Metals EPA 6010/7470	PCBs EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2/24/14	1310	563-IV-F/F-SS-007	X	X	X	X	4oz-jar	S		—	✓		1	
2		1313	563-IV-F/F-SS-008	X	X	X	X		S		—	✓		1	
3		1314	563-IV-F/F-SS-009	X	X	X	X		S		—	✓		1	
4		1321	564-IV-F/F-SS-001	X	X	X	X		S		—	✓		1	
5		1322	564-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	
6		1323	564-IV-F/F-SS-003	X	X	X	X		S		—	✓		1	
7		1325	564-IV-F/F-SS-004	X	X	X	X		S		—	✓		1	
8		1326	564-IV-F/F-SS-005	X	X	X	X		S		—	✓		1	
9		1327	564-IV-F/F-SS-006	X	X	X	X		S		—	✓		1	
10		1328	564-IV-F/F-SS-007	X	X	X	X		S		—	✓		1	
11		1330	564-IV-F/F-SS-008	X	X	X	X		S		—	✓		1	
12		1331	564-IV-F/F-SS-009	X	X	X	X		S		—	✓		1	
13	2/24/14	1308	563-IV-F/F-SS-005	X	X	X	X	4oz jar	S		—	✓		1	
14		1309	563-IV-F/F-SS-006	X	X	X	X		S		—	✓		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Jorge Perez COMPANY: Amec	2/24/14	1530	SIGNATURE: [signature] PRINTED NAME: RUDY MIGA COMPANY: CEL	2/24/14	1530
SIGNATURE: [signature] PRINTED NAME: RUDY MIGA COMPANY: CEL	2/24/14	1730	SIGNATURE: [signature] PRINTED NAME: DANNY LE COMPANY: CEL	2/24/14	17:30
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS: on COC# 25728 QCB-022414 pertains to samples on COC # 27406 ~~and 27408~~ VK.

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02-1642

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 02/24/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.3 °C - 0.3 °C (CF) = 2.0 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 876

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 876

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

The original report has been revised/corrected.

CALSCIENCE

WORK ORDER NUMBER: 14-02-1643

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 02/28/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-02-1643

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/24/14. They were assigned to Work Order 14-02-1643.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1643
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	02/24/14 17:30
		Number of Containers:	30
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#854	14-02-1643-1	02/24/14 07:20	5	Solid
#855	14-02-1643-2	02/24/14 07:35	5	Solid
567-IV-F/F-SS-001	14-02-1643-3	02/24/14 10:45	1	Solid
567-IV-F/F-SS-002	14-02-1643-4	02/24/14 10:50	1	Solid
567-IV-F/F-SS-003	14-02-1643-5	02/24/14 10:53	1	Solid
567-IV-F/F-SS-004	14-02-1643-6	02/24/14 10:54	1	Solid
567-IV-F/F-SS-005	14-02-1643-7	02/24/14 10:56	1	Solid
567-IV-F/F-SS-006	14-02-1643-8	02/24/14 10:58	1	Solid
567-IV-F/F-SS-007	14-02-1643-9	02/24/14 10:59	1	Solid
567-IV-F/F-SS-008	14-02-1643-10	02/24/14 11:00	1	Solid
567-IV-F/F-SS-009	14-02-1643-11	02/24/14 11:02	1	Solid
568-IV-F/F-SS-001	14-02-1643-12	02/24/14 11:10	1	Solid
568-IV-F/F-SS-002	14-02-1643-13	02/24/14 11:12	1	Solid
568-IV-F/F-SS-003	14-02-1643-14	02/24/14 11:13	1	Solid
568-IV-F/F-SS-004	14-02-1643-15	02/24/14 11:14	1	Solid
568-IV-F/F-SS-005	14-02-1643-16	02/24/14 11:15	1	Solid
568-IV-F/F-SS-006	14-02-1643-17	02/24/14 11:16	1	Solid
568-IV-F/F-SS-007	14-02-1643-18	02/24/14 11:18	1	Solid
568-IV-F/F-SS-008	14-02-1643-19	02/24/14 11:19	1	Solid
568-IV-F/F-SS-009	14-02-1643-20	02/24/14 11:20	1	Solid
566-IV-F/F-SS-001	14-02-1643-21	02/24/14 11:25	1	Solid
566-IV-F/F-SS-002	14-02-1643-22	02/24/14 11:26	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#854 (14-02-1643-1)						
Benzene	1.1		0.95	ug/kg	EPA 8260B	EPA 5035
#855 (14-02-1643-2)						
C17-C18	190		50	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	68		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	230		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	1700		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	870		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	110		50	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	160		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	3400		50	mg/kg	EPA 8015B (M)	EPA 3550B
567-IV-F/F-SS-001 (14-02-1643-3)						
Arsenic	1.49		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	147		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.401		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.4		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	18.6		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	1.62		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.5		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	55.7		1.01	mg/kg	EPA 6010B	EPA 3050B
567-IV-F/F-SS-002 (14-02-1643-4)						
Barium	94.9		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.313		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.7		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.41		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	31.4		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	6.27		0.510	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.20		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	21.9		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	39.3		1.02	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		Page 2 of 10

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
567-IV-F/F-SS-003 (14-02-1643-5)						
Arsenic	1.50		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	94.8		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.333		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.0		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.13		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	14.4		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	5.30		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.84		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	26.5		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	39.5		1.02	mg/kg	EPA 6010B	EPA 3050B
567-IV-F/F-SS-004 (14-02-1643-6)						
Arsenic	2.19		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	88.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.317		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.81		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	16.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	4.87		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.30		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	24.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	41.7		1.00	mg/kg	EPA 6010B	EPA 3050B
567-IV-F/F-SS-005 (14-02-1643-7)						
Arsenic	0.912		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	92.9		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.286		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	9.62		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.31		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	14.6		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	44.9		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	6.99		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	17.9		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	63.4		1.01	mg/kg	EPA 6010B	EPA 3050B
C25-C28	9.4		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	21		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	15		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	8.0		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	58		4.9	mg/kg	EPA 8015B (M)	EPA 3550B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
567-IV-F/F-SS-006 (14-02-1643-8)						
Arsenic	1.46		0.785	mg/kg	EPA 6010B	EPA 3050B
Barium	132		0.524	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.377		0.262	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.3		0.262	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.7		0.262	mg/kg	EPA 6010B	EPA 3050B
Copper	17.0		0.524	mg/kg	EPA 6010B	EPA 3050B
Lead	2.11		0.524	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.6		0.262	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.4		0.262	mg/kg	EPA 6010B	EPA 3050B
Zinc	53.1		1.05	mg/kg	EPA 6010B	EPA 3050B
567-IV-F/F-SS-007 (14-02-1643-9)						
Arsenic	0.999		0.732	mg/kg	EPA 6010B	EPA 3050B
Barium	107		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.352		0.244	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.6		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.28		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	10.2		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	20.0		0.488	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.18		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	21.4		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.2		0.976	mg/kg	EPA 6010B	EPA 3050B
567-IV-F/F-SS-008 (14-02-1643-10)						
Arsenic	1.67		0.781	mg/kg	EPA 6010B	EPA 3050B
Barium	123		0.521	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.364		0.260	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.6		0.260	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.0		0.260	mg/kg	EPA 6010B	EPA 3050B
Copper	26.4		0.521	mg/kg	EPA 6010B	EPA 3050B
Lead	3.43		0.521	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.0		0.260	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.9		0.260	mg/kg	EPA 6010B	EPA 3050B
Zinc	53.1		1.04	mg/kg	EPA 6010B	EPA 3050B
C17-C18	5.0		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	6.2		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	6.4		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	37		4.9	mg/kg	EPA 8015B (M)	EPA 3550B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		Page 4 of 10

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
567-IV-F/F-SS-009 (14-02-1643-11)						
Arsenic	0.789		0.721	mg/kg	EPA 6010B	EPA 3050B
Barium	91.9		0.481	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.323		0.240	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.4		0.240	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.72		0.240	mg/kg	EPA 6010B	EPA 3050B
Copper	9.27		0.481	mg/kg	EPA 6010B	EPA 3050B
Lead	12.1		0.481	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.34		0.240	mg/kg	EPA 6010B	EPA 3050B
Vanadium	19.1		0.240	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.0		0.962	mg/kg	EPA 6010B	EPA 3050B
568-IV-F/F-SS-001 (14-02-1643-12)						
Arsenic	1.19		0.773	mg/kg	EPA 6010B	EPA 3050B
Barium	136		0.515	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.392		0.258	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.1		0.258	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.7		0.258	mg/kg	EPA 6010B	EPA 3050B
Copper	17.1		0.515	mg/kg	EPA 6010B	EPA 3050B
Lead	1.62		0.515	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.7		0.258	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.6		0.258	mg/kg	EPA 6010B	EPA 3050B
Zinc	54.3		1.03	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
568-IV-F/F-SS-002 (14-02-1643-13)						
Arsenic	1.99		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	113		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.349		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.7		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.54		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	14.1		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	11.1		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.3		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	27.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	64.7		0.995	mg/kg	EPA 6010B	EPA 3050B
C17-C18	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	7.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	6.9		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	92		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-02-1643 Former Pechiney Cast Plate / 0106270030 02/24/14
Attn:	Linda Conlan		Page 6 of 10

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
568-IV-F/F-SS-003 (14-02-1643-14)						
Arsenic	2.10		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	104		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.336		0.256	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.2		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.36		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	17.9		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	15.1		0.513	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.3		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.0		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	60.8		1.03	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.326		0.0862	mg/kg	EPA 7471A	EPA 7471A Total
C9-C10	9.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	6.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	8.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	23		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	37		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	49		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	35		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	33		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	46		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	54		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	47		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	36		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	18		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	400		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	52		50	ug/kg	EPA 8082	EPA 3540C
568-IV-F/F-SS-004 (14-02-1643-15)						
Arsenic	1.71		0.781	mg/kg	EPA 6010B	EPA 3050B
Barium	136		0.521	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.498		0.260	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.1		0.260	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.72		0.260	mg/kg	EPA 6010B	EPA 3050B
Copper	12.2		0.521	mg/kg	EPA 6010B	EPA 3050B
Lead	6.48		0.521	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.1		0.260	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.0		0.260	mg/kg	EPA 6010B	EPA 3050B
Zinc	44.0		1.04	mg/kg	EPA 6010B	EPA 3050B

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
568-IV-F/F-SS-005 (14-02-1643-16)						
Arsenic	1.28		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	84.5		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.291		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.6		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.15		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	17.0		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	3.43		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.50		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	25.0		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	42.9		0.980	mg/kg	EPA 6010B	EPA 3050B
C19-C20	16		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	14		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	14		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	24		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	41		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	35		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	34		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	27		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	210		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
568-IV-F/F-SS-006 (14-02-1643-17)						
Arsenic	2.13		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	137		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.384		0.256	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.3		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.08		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	20.4		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	24.5		0.513	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.07		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	25.6		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	53.4		1.03	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		Page 8 of 10

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
568-IV-F/F-SS-007 (14-02-1643-18)						
Arsenic	1.01		0.785	mg/kg	EPA 6010B	EPA 3050B
Barium	101		0.524	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.342		0.262	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.4		0.262	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.79		0.262	mg/kg	EPA 6010B	EPA 3050B
Copper	14.9		0.524	mg/kg	EPA 6010B	EPA 3050B
Lead	10.6		0.524	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.30		0.262	mg/kg	EPA 6010B	EPA 3050B
Vanadium	27.5		0.262	mg/kg	EPA 6010B	EPA 3050B
Zinc	50.4		1.05	mg/kg	EPA 6010B	EPA 3050B
C15-C16	6.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	18		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	19		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	29		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	26		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	21		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	190		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	64		50	ug/kg	EPA 8082	EPA 3540C
568-IV-F/F-SS-008 (14-02-1643-19)						
Arsenic	0.895		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	94.3		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.329		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.7		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.58		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	12.4		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	35.1		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.71		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	20.1		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	53.2		0.990	mg/kg	EPA 6010B	EPA 3050B
C33-C36	6.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	6.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
568-IV-F/F-SS-009 (14-02-1643-20)						
Arsenic	0.800		0.777	mg/kg	EPA 6010B	EPA 3050B
Barium	102		0.518	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.443		0.259	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.2		0.259	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.62		0.259	mg/kg	EPA 6010B	EPA 3050B
Copper	8.37		0.518	mg/kg	EPA 6010B	EPA 3050B
Lead	3.04		0.518	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.18		0.259	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.9		0.259	mg/kg	EPA 6010B	EPA 3050B
Zinc	31.3		1.04	mg/kg	EPA 6010B	EPA 3050B
566-IV-F/F-SS-001 (14-02-1643-21)						
Arsenic	0.931		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.491		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.22		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	11.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	4.75		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	38.5		1.00	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
566-IV-F/F-SS-002 (14-02-1643-22)						
Arsenic	2.49		0.777	mg/kg	EPA 6010B	EPA 3050B
Barium	289		0.518	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.630		0.259	mg/kg	EPA 6010B	EPA 3050B
Chromium	20.2		0.259	mg/kg	EPA 6010B	EPA 3050B
Cobalt	13.1		0.259	mg/kg	EPA 6010B	EPA 3050B
Copper	21.6		0.518	mg/kg	EPA 6010B	EPA 3050B
Lead	7.44		0.518	mg/kg	EPA 6010B	EPA 3050B
Nickel	14.8		0.259	mg/kg	EPA 6010B	EPA 3050B
Vanadium	44.4		0.259	mg/kg	EPA 6010B	EPA 3050B
Zinc	65.0		1.04	mg/kg	EPA 6010B	EPA 3050B
C19-C20	5.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	7.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	9.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	7.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	21		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	74		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#854	**14-02-1643-1-A**	**02/24/14 07:20**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 15:45**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#855	**14-02-1643-2-A**	**02/24/14 07:35**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 15:14**	**140225B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	ND	50	10.0	
C9-C10	ND	50	10.0	
C11-C12	ND	50	10.0	
C13-C14	ND	50	10.0	
C15-C16	ND	50	10.0	
C17-C18	190	50	10.0	
C19-C20	68	50	10.0	
C21-C22	ND	50	10.0	
C23-C24	ND	50	10.0	
C25-C28	230	50	10.0	
C29-C32	1700	50	10.0	
C33-C36	870	50	10.0	
C37-C40	110	50	10.0	
C41-C44	160	50	10.0	
C6-C44 Total	3400	50	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	136	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-001	**14-02-1643-3-A**	**02/24/14 10:45**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 16:01**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	80	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-002	**14-02-1643-4-A**	**02/24/14 10:50**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 16:19**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-003	**14-02-1643-5-A**	**02/24/14 10:53**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 16:36**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-004	**14-02-1643-6-A**	**02/24/14 10:54**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 16:54**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-005	**14-02-1643-7-A**	**02/24/14 10:56**	**Solid**	**GC 47**	**02/25/14**	**02/26/14 09:18**	**140225B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	9.4	4.9	0.980	
C29-C32	21	4.9	0.980	
C33-C36	15	4.9	0.980	
C37-C40	8.0	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	58	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-006	**14-02-1643-8-A**	**02/24/14 10:58**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 17:11**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	87	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-007	**14-02-1643-9-A**	**02/24/14 10:59**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 17:28**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-008	**14-02-1643-10-A**	**02/24/14 11:00**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 17:46**	**140225B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	5.0	4.9	0.980	
C19-C20	6.2	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	6.4	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	37	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-009	**14-02-1643-11-A**	**02/24/14 11:02**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 18:04**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 12 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-001	**14-02-1643-12-A**	**02/24/14 11:10**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 18:37**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-002	**14-02-1643-13-A**	**02/24/14 11:12**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 18:54**	**140225B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	10	5.0	0.990	
C19-C20	12	5.0	0.990	
C21-C22	11	5.0	0.990	
C23-C24	7.4	5.0	0.990	
C25-C28	12	5.0	0.990	
C29-C32	13	5.0	0.990	
C33-C36	11	5.0	0.990	
C37-C40	6.9	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	92	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 14 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-003	**14-02-1643-14-A**	**02/24/14 11:13**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 20:36**	**140225B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	9.7	5.0	0.990	
C11-C12	6.2	5.0	0.990	
C13-C14	8.1	5.0	0.990	
C15-C16	23	5.0	0.990	
C17-C18	37	5.0	0.990	
C19-C20	49	5.0	0.990	
C21-C22	35	5.0	0.990	
C23-C24	33	5.0	0.990	
C25-C28	46	5.0	0.990	
C29-C32	54	5.0	0.990	
C33-C36	47	5.0	0.990	
C37-C40	36	5.0	0.990	
C41-C44	18	5.0	0.990	
C6-C44 Total	400	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	82	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-004	**14-02-1643-15-A**	**02/24/14 11:14**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 19:12**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 16 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-005	**14-02-1643-16-A**	**02/24/14 11:15**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 20:53**	**140225B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	16	4.9	0.980	
C21-C22	14	4.9	0.980	
C23-C24	14	4.9	0.980	
C25-C28	24	4.9	0.980	
C29-C32	41	4.9	0.980	
C33-C36	35	4.9	0.980	
C37-C40	34	4.9	0.980	
C41-C44	27	4.9	0.980	
C6-C44 Total	210	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-006	**14-02-1643-17-A**	**02/24/14 11:16**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 19:28**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 18 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-007	**14-02-1643-18-A**	**02/24/14 11:18**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 19:45**	**140225B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	6.1	5.0	0.990	
C17-C18	14	5.0	0.990	
C19-C20	18	5.0	0.990	
C21-C22	19	5.0	0.990	
C23-C24	16	5.0	0.990	
C25-C28	24	5.0	0.990	
C29-C32	29	5.0	0.990	
C33-C36	26	5.0	0.990	
C37-C40	21	5.0	0.990	
C41-C44	12	5.0	0.990	
C6-C44 Total	190	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-008	**14-02-1643-19-A**	**02/24/14 11:19**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 20:02**	**140225B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	6.2	5.0	1.00	
C37-C40	6.5	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	16	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 20 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-009	**14-02-1643-20-A**	**02/24/14 11:20**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 20:19**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	84	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 21 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-001	**14-02-1643-21-S**	**02/24/14 11:25**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 11:16**	**140225B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	103	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 22 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-002	**14-02-1643-22-A**	**02/24/14 11:26**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 03:18**	**140225B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	5.5	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	7.6	5.0	1.00	
C29-C32	9.1	5.0	1.00	
C33-C36	7.1	5.0	1.00	
C37-C40	11	5.0	1.00	
C41-C44	21	5.0	1.00	
C6-C44 Total	74	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 23 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-789**	**N/A**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 22:05**	**140225B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 24 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-786**	**N/A**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 14:06**	**140225B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-001	**14-02-1643-3-A**	**02/24/14 10:45**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:45**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	1.49	0.758	1.01	
Barium	147	0.505	1.01	
Beryllium	0.401	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	17.4	0.253	1.01	
Cobalt	12.2	0.253	1.01	
Copper	18.6	0.505	1.01	
Lead	1.62	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	13.5	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	34.8	0.253	1.01	
Zinc	55.7	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-002	**14-02-1643-4-A**	**02/24/14 10:50**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:46**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	ND	0.765	1.02	
Barium	94.9	0.510	1.02	
Beryllium	0.313	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	10.7	0.255	1.02	
Cobalt	7.41	0.255	1.02	
Copper	31.4	0.510	1.02	
Lead	6.27	0.510	1.02	
Molybdenum	ND	0.255	1.02	
Nickel	8.20	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	21.9	0.255	1.02	
Zinc	39.3	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-003	**14-02-1643-5-A**	**02/24/14 10:53**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:47**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	1.50	0.761	1.02	
Barium	94.8	0.508	1.02	
Beryllium	0.333	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	12.0	0.254	1.02	
Cobalt	8.13	0.254	1.02	
Copper	14.4	0.508	1.02	
Lead	5.30	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	8.84	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	26.5	0.254	1.02	
Zinc	39.5	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-004	**14-02-1643-6-A**	**02/24/14 10:54**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:48**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	2.19	0.750	1.00	
Barium	88.3	0.500	1.00	
Beryllium	0.317	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	10.9	0.250	1.00	
Cobalt	7.81	0.250	1.00	
Copper	16.7	0.500	1.00	
Lead	4.87	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	8.30	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	24.4	0.250	1.00	
Zinc	41.7	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-005	**14-02-1643-7-A**	**02/24/14 10:56**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:53**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	0.912	0.758	1.01	
Barium	92.9	0.505	1.01	
Beryllium	0.286	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	9.62	0.253	1.01	
Cobalt	6.31	0.253	1.01	
Copper	14.6	0.505	1.01	
Lead	44.9	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	6.99	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	17.9	0.253	1.01	
Zinc	63.4	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-006	**14-02-1643-8-A**	**02/24/14 10:58**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:54**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.785	1.05	
Arsenic	1.46	0.785	1.05	
Barium	132	0.524	1.05	
Beryllium	0.377	0.262	1.05	
Cadmium	ND	0.524	1.05	
Chromium	16.3	0.262	1.05	
Cobalt	11.7	0.262	1.05	
Copper	17.0	0.524	1.05	
Lead	2.11	0.524	1.05	
Molybdenum	ND	0.262	1.05	
Nickel	12.6	0.262	1.05	
Selenium	ND	0.785	1.05	
Silver	ND	0.262	1.05	
Thallium	ND	0.785	1.05	
Vanadium	34.4	0.262	1.05	
Zinc	53.1	1.05	1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-007	**14-02-1643-9-A**	**02/24/14 10:59**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:55**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.732	0.976	
Arsenic	0.999	0.732	0.976	
Barium	107	0.488	0.976	
Beryllium	0.352	0.244	0.976	
Cadmium	ND	0.488	0.976	
Chromium	11.6	0.244	0.976	
Cobalt	7.28	0.244	0.976	
Copper	10.2	0.488	0.976	
Lead	20.0	0.488	0.976	
Molybdenum	ND	0.244	0.976	
Nickel	8.18	0.244	0.976	
Selenium	ND	0.732	0.976	
Silver	ND	0.244	0.976	
Thallium	ND	0.732	0.976	
Vanadium	21.4	0.244	0.976	
Zinc	48.2	0.976	0.976	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-008	**14-02-1643-10-A**	**02/24/14 11:00**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:56**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	1.67	0.781	1.04	
Barium	123	0.521	1.04	
Beryllium	0.364	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	15.6	0.260	1.04	
Cobalt	11.0	0.260	1.04	
Copper	26.4	0.521	1.04	
Lead	3.43	0.521	1.04	
Molybdenum	ND	0.260	1.04	
Nickel	12.0	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	32.9	0.260	1.04	
Zinc	53.1	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-009	**14-02-1643-11-A**	**02/24/14 11:02**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:57**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.721	0.962	
Arsenic	0.789	0.721	0.962	
Barium	91.9	0.481	0.962	
Beryllium	0.323	0.240	0.962	
Cadmium	ND	0.481	0.962	
Chromium	10.4	0.240	0.962	
Cobalt	6.72	0.240	0.962	
Copper	9.27	0.481	0.962	
Lead	12.1	0.481	0.962	
Molybdenum	ND	0.240	0.962	
Nickel	7.34	0.240	0.962	
Selenium	ND	0.721	0.962	
Silver	ND	0.240	0.962	
Thallium	ND	0.721	0.962	
Vanadium	19.1	0.240	0.962	
Zinc	48.0	0.962	0.962	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-001	**14-02-1643-12-A**	**02/24/14 11:10**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:58**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.773	1.03	
Arsenic	1.19	0.773	1.03	
Barium	136	0.515	1.03	
Beryllium	0.392	0.258	1.03	
Cadmium	ND	0.515	1.03	
Chromium	16.1	0.258	1.03	
Cobalt	11.7	0.258	1.03	
Copper	17.1	0.515	1.03	
Lead	1.62	0.515	1.03	
Molybdenum	ND	0.258	1.03	
Nickel	12.7	0.258	1.03	
Selenium	ND	0.773	1.03	
Silver	ND	0.258	1.03	
Thallium	ND	0.773	1.03	
Vanadium	33.6	0.258	1.03	
Zinc	54.3	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-002	**14-02-1643-13-A**	**02/24/14 11:12**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:59**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	1.99	0.746	0.995	
Barium	113	0.498	0.995	
Beryllium	0.349	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	12.7	0.249	0.995	
Cobalt	8.54	0.249	0.995	
Copper	14.1	0.498	0.995	
Lead	11.1	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	10.3	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	27.1	0.249	0.995	
Zinc	64.7	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 12 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-003	**14-02-1643-14-A**	**02/24/14 11:13**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:00**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	2.10	0.769	1.03	
Barium	104	0.513	1.03	
Beryllium	0.336	0.256	1.03	
Cadmium	ND	0.513	1.03	
Chromium	13.2	0.256	1.03	
Cobalt	9.36	0.256	1.03	
Copper	17.9	0.513	1.03	
Lead	15.1	0.513	1.03	
Molybdenum	ND	0.256	1.03	
Nickel	10.3	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	29.0	0.256	1.03	
Zinc	60.8	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-004	**14-02-1643-15-A**	**02/24/14 11:14**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:01**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	1.71	0.781	1.04	
Barium	136	0.521	1.04	
Beryllium	0.498	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	16.1	0.260	1.04	
Cobalt	9.72	0.260	1.04	
Copper	12.2	0.521	1.04	
Lead	6.48	0.521	1.04	
Molybdenum	ND	0.260	1.04	
Nickel	11.1	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	35.0	0.260	1.04	
Zinc	44.0	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 14 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-005	**14-02-1643-16-A**	**02/24/14 11:15**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:02**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	1.28	0.735	0.980	
Barium	84.5	0.490	0.980	
Beryllium	0.291	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	10.6	0.245	0.980	
Cobalt	8.15	0.245	0.980	
Copper	17.0	0.490	0.980	
Lead	3.43	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	8.50	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	25.0	0.245	0.980	
Zinc	42.9	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-006	**14-02-1643-17-A**	**02/24/14 11:16**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:07**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	2.13	0.769	1.03	
Barium	137	0.513	1.03	
Beryllium	0.384	0.256	1.03	
Cadmium	ND	0.513	1.03	
Chromium	13.3	0.256	1.03	
Cobalt	8.08	0.256	1.03	
Copper	20.4	0.513	1.03	
Lead	24.5	0.513	1.03	
Molybdenum	ND	0.256	1.03	
Nickel	9.07	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	25.6	0.256	1.03	
Zinc	53.4	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 16 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-007	**14-02-1643-18-A**	**02/24/14 11:18**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:08**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.785	1.05	
Arsenic	1.01	0.785	1.05	
Barium	101	0.524	1.05	
Beryllium	0.342	0.262	1.05	
Cadmium	ND	0.524	1.05	
Chromium	13.4	0.262	1.05	
Cobalt	8.79	0.262	1.05	
Copper	14.9	0.524	1.05	
Lead	10.6	0.524	1.05	
Molybdenum	ND	0.262	1.05	
Nickel	9.30	0.262	1.05	
Selenium	ND	0.785	1.05	
Silver	ND	0.262	1.05	
Thallium	ND	0.785	1.05	
Vanadium	27.5	0.262	1.05	
Zinc	50.4	1.05	1.05	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-008	**14-02-1643-19-A**	**02/24/14 11:19**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:09**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	0.895	0.743	0.990	
Barium	94.3	0.495	0.990	
Beryllium	0.329	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	10.7	0.248	0.990	
Cobalt	6.58	0.248	0.990	
Copper	12.4	0.495	0.990	
Lead	35.1	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	7.71	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	20.1	0.248	0.990	
Zinc	53.2	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 18 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-009	**14-02-1643-20-A**	**02/24/14 11:20**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:10**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.777	1.04	
Arsenic	0.800	0.777	1.04	
Barium	102	0.518	1.04	
Beryllium	0.443	0.259	1.04	
Cadmium	ND	0.518	1.04	
Chromium	14.2	0.259	1.04	
Cobalt	7.62	0.259	1.04	
Copper	8.37	0.518	1.04	
Lead	3.04	0.518	1.04	
Molybdenum	ND	0.259	1.04	
Nickel	9.18	0.259	1.04	
Selenium	ND	0.777	1.04	
Silver	ND	0.259	1.04	
Thallium	ND	0.777	1.04	
Vanadium	30.9	0.259	1.04	
Zinc	31.3	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-001	**14-02-1643-21-A**	**02/24/14 11:25**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:11**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	0.931	0.750	1.00	
Barium	129	0.500	1.00	
Beryllium	0.491	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	15.4	0.250	1.00	
Cobalt	8.22	0.250	1.00	
Copper	11.8	0.500	1.00	
Lead	4.75	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	10.3	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	33.5	0.250	1.00	
Zinc	38.5	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 20 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-002	**14-02-1643-22-A**	**02/24/14 11:26**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 17:12**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.777	1.04	
Arsenic	2.49	0.777	1.04	
Barium	289	0.518	1.04	
Beryllium	0.630	0.259	1.04	
Cadmium	ND	0.518	1.04	
Chromium	20.2	0.259	1.04	
Cobalt	13.1	0.259	1.04	
Copper	21.6	0.518	1.04	
Lead	7.44	0.518	1.04	
Molybdenum	ND	0.259	1.04	
Nickel	14.8	0.259	1.04	
Selenium	ND	0.777	1.04	
Silver	ND	0.259	1.04	
Thallium	ND	0.777	1.04	
Vanadium	44.4	0.259	1.04	
Zinc	65.0	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 21 of 21

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18068**	**N/A**	**Solid**	**ICP 7300**	**02/25/14**	**02/26/14 11:49**	**140225L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-001	**14-02-1643-3-A**	**02/24/14 10:45**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:36**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

567-IV-F/F-SS-002	**14-02-1643-4-A**	**02/24/14 10:50**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:38**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

567-IV-F/F-SS-003	**14-02-1643-5-A**	**02/24/14 10:53**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:40**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

567-IV-F/F-SS-004	**14-02-1643-6-A**	**02/24/14 10:54**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:47**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

567-IV-F/F-SS-005	**14-02-1643-7-A**	**02/24/14 10:56**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:53**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0781	1.00	

567-IV-F/F-SS-006	**14-02-1643-8-A**	**02/24/14 10:58**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:56**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

567-IV-F/F-SS-007	**14-02-1643-9-A**	**02/24/14 10:59**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:58**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0909	1.00	

567-IV-F/F-SS-008	**14-02-1643-10-A**	**02/24/14 11:00**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:00**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-009	**14-02-1643-11-A**	**02/24/14 11:02**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:02**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

568-IV-F/F-SS-001	**14-02-1643-12-A**	**02/24/14 11:10**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:04**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

568-IV-F/F-SS-002	**14-02-1643-13-A**	**02/24/14 11:12**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:07**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

568-IV-F/F-SS-003	**14-02-1643-14-A**	**02/24/14 11:13**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:13**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.326	0.0862	1.00	

568-IV-F/F-SS-004	**14-02-1643-15-A**	**02/24/14 11:14**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:15**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

568-IV-F/F-SS-005	**14-02-1643-16-A**	**02/24/14 11:15**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:18**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

568-IV-F/F-SS-006	**14-02-1643-17-A**	**02/24/14 11:16**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:20**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0769	1.00	

568-IV-F/F-SS-007	**14-02-1643-18-A**	**02/24/14 11:18**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:22**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-008	**14-02-1643-19-A**	**02/24/14 11:19**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:24**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

568-IV-F/F-SS-009	**14-02-1643-20-A**	**02/24/14 11:20**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:27**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

566-IV-F/F-SS-001	**14-02-1643-21-A**	**02/24/14 11:25**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:29**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

566-IV-F/F-SS-002	**14-02-1643-22-A**	**02/24/14 11:26**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 13:31**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Method Blank	**099-16-272-49**	**N/A**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:31**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-001	**14-02-1643-3-A**	**02/24/14 10:45**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 21:16**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

567-IV-F/F-SS-002	**14-02-1643-4-A**	**02/24/14 10:50**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 21:34**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-003	**14-02-1643-5-A**	**02/24/14 10:53**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 21:52**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

567-IV-F/F-SS-004	**14-02-1643-6-A**	**02/24/14 10:54**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 22:10**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-005	**14-02-1643-7-A**	**02/24/14 10:56**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 22:27**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	76	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

567-IV-F/F-SS-006	**14-02-1643-8-A**	**02/24/14 10:58**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 22:45**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-007	**14-02-1643-9-A**	**02/24/14 10:59**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 23:03**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

567-IV-F/F-SS-008	**14-02-1643-10-A**	**02/24/14 11:00**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 23:21**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-009	**14-02-1643-11-A**	**02/24/14 11:02**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 23:39**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

568-IV-F/F-SS-001	**14-02-1643-12-A**	**02/24/14 11:10**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 23:57**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-002	**14-02-1643-13-A**	**02/24/14 11:12**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 00:14**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

568-IV-F/F-SS-003	**14-02-1643-14-A**	**02/24/14 11:13**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 00:32**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	52	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	60-125	
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-004	**14-02-1643-15-A**	**02/24/14 11:14**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 00:50**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

568-IV-F/F-SS-005	**14-02-1643-16-A**	**02/24/14 11:15**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 01:08**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-006	**14-02-1643-17-A**	**02/24/14 11:16**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 01:26**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

568-IV-F/F-SS-007	**14-02-1643-18-A**	**02/24/14 11:18**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 01:44**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	64	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-008	**14-02-1643-19-A**	**02/24/14 11:19**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 02:01**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

568-IV-F/F-SS-009	**14-02-1643-20-A**	**02/24/14 11:20**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 02:37**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-001	**14-02-1643-21-A**	**02/24/14 11:25**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 02:55**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

566-IV-F/F-SS-002	**14-02-1643-22-A**	**02/24/14 11:26**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 09:27**	**140224L15**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-201**	**N/A**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 20:58**	**140224L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#854	**14-02-1643-1-D**	**02/24/14 07:20**	**Solid**	**GC/MS Z**	**02/24/14**	**02/25/14 12:46**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	47	1.00	
Benzene	1.1	0.95	1.00	
Bromobenzene	ND	0.95	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.95	1.00	
Bromoform	ND	4.7	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.95	1.00	
sec-Butylbenzene	ND	0.95	1.00	
tert-Butylbenzene	ND	0.95	1.00	
Carbon Disulfide	ND	9.5	1.00	
Carbon Tetrachloride	ND	0.95	1.00	
Chlorobenzene	ND	0.95	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.95	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.95	1.00	
4-Chlorotoluene	ND	0.95	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.7	1.00	
1,2-Dibromoethane	ND	0.95	1.00	
Dibromomethane	ND	0.95	1.00	
1,2-Dichlorobenzene	ND	0.95	1.00	
1,3-Dichlorobenzene	ND	0.95	1.00	
1,4-Dichlorobenzene	ND	0.95	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.95	1.00	
1,2-Dichloroethane	ND	0.95	1.00	
1,1-Dichloroethene	ND	0.95	1.00	
c-1,2-Dichloroethene	ND	0.95	1.00	
t-1,2-Dichloroethene	ND	0.95	1.00	
1,2-Dichloropropane	ND	0.95	1.00	
1,3-Dichloropropane	ND	0.95	1.00	
2,2-Dichloropropane	ND	4.7	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 2 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.95	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	ND	0.95	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.95	1.00	
p-Isopropyltoluene	ND	0.95	1.00	
Methylene Chloride	ND	9.5	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.5	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.95	1.00	
1,1,1,2-Tetrachloroethane	ND	0.95	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.95	1.00	
Toluene	ND	0.95	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.95	1.00	
1,1,2-Trichloroethane	ND	0.95	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.5	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.5	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.5	1.00	
Vinyl Chloride	ND	0.95	1.00	
p/m-Xylene	ND	1.9	1.00	
o-Xylene	ND	0.95	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	113	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#855	**14-02-1643-2-D**	**02/24/14 07:35**	**Solid**	**GC/MS Z**	**02/24/14**	**02/25/14 13:12**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	54	1.00	
Benzene	ND	1.1	1.00	
Bromobenzene	ND	1.1	1.00	
Bromochloromethane	ND	2.2	1.00	
Bromodichloromethane	ND	1.1	1.00	
Bromoform	ND	5.4	1.00	
Bromomethane	ND	22	1.00	
2-Butanone	ND	22	1.00	
n-Butylbenzene	ND	1.1	1.00	
sec-Butylbenzene	ND	1.1	1.00	
tert-Butylbenzene	ND	1.1	1.00	
Carbon Disulfide	ND	11	1.00	
Carbon Tetrachloride	ND	1.1	1.00	
Chlorobenzene	ND	1.1	1.00	
Chloroethane	ND	2.2	1.00	
Chloroform	ND	1.1	1.00	
Chloromethane	ND	22	1.00	
2-Chlorotoluene	ND	1.1	1.00	
4-Chlorotoluene	ND	1.1	1.00	
Dibromochloromethane	ND	2.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.4	1.00	
1,2-Dibromoethane	ND	1.1	1.00	
Dibromomethane	ND	1.1	1.00	
1,2-Dichlorobenzene	ND	1.1	1.00	
1,3-Dichlorobenzene	ND	1.1	1.00	
1,4-Dichlorobenzene	ND	1.1	1.00	
Dichlorodifluoromethane	ND	2.2	1.00	
1,1-Dichloroethane	ND	1.1	1.00	
1,2-Dichloroethane	ND	1.1	1.00	
1,1-Dichloroethene	ND	1.1	1.00	
c-1,2-Dichloroethene	ND	1.1	1.00	
t-1,2-Dichloroethene	ND	1.1	1.00	
1,2-Dichloropropane	ND	1.1	1.00	
1,3-Dichloropropane	ND	1.1	1.00	
2,2-Dichloropropane	ND	5.4	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.2	1.00	
c-1,3-Dichloropropene	ND	1.1	1.00	
t-1,3-Dichloropropene	ND	2.2	1.00	
Ethylbenzene	ND	1.1	1.00	
2-Hexanone	ND	22	1.00	
Isopropylbenzene	ND	1.1	1.00	
p-Isopropyltoluene	ND	1.1	1.00	
Methylene Chloride	ND	11	1.00	
4-Methyl-2-Pentanone	ND	22	1.00	
Naphthalene	ND	11	1.00	
n-Propylbenzene	ND	2.2	1.00	
Styrene	ND	1.1	1.00	
1,1,1,2-Tetrachloroethane	ND	1.1	1.00	
1,1,2,2-Tetrachloroethane	ND	2.2	1.00	
Tetrachloroethene	ND	1.1	1.00	
Toluene	ND	1.1	1.00	
1,2,3-Trichlorobenzene	ND	2.2	1.00	
1,2,4-Trichlorobenzene	ND	2.2	1.00	
1,1,1-Trichloroethane	ND	1.1	1.00	
1,1,2-Trichloroethane	ND	1.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
Trichloroethene	ND	2.2	1.00	
Trichlorofluoromethane	ND	11	1.00	
1,2,3-Trichloropropane	ND	2.2	1.00	
1,2,4-Trimethylbenzene	ND	2.2	1.00	
1,3,5-Trimethylbenzene	ND	2.2	1.00	
Vinyl Acetate	ND	11	1.00	
Vinyl Chloride	ND	1.1	1.00	
p/m-Xylene	ND	2.2	1.00	
o-Xylene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	111	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-025-24930**	**N/A**	**Solid**	**GC/MS Z**	**02/25/14**	**02/25/14 12:19**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	1.0	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	1.0	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	1.0	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	107	79-133	
1,2-Dichloroethane-d4	107	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-001	**14-02-1643-3-A**	**02/24/14 10:45**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 13:23**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	60-132	
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-002	**14-02-1643-4-A**	**02/24/14 10:50**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 15:07**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.8	1.00	
Bromobenzene	ND	4.8	1.00	
Bromochloromethane	ND	4.8	1.00	
Bromodichloromethane	ND	4.8	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	48	1.00	
n-Butylbenzene	ND	4.8	1.00	
sec-Butylbenzene	ND	4.8	1.00	
tert-Butylbenzene	ND	4.8	1.00	
Carbon Disulfide	ND	48	1.00	
Carbon Tetrachloride	ND	4.8	1.00	
Chlorobenzene	ND	4.8	1.00	
Chloroethane	ND	4.8	1.00	
Chloroform	ND	4.8	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.8	1.00	
4-Chlorotoluene	ND	4.8	1.00	
Dibromochloromethane	ND	4.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.6	1.00	
1,2-Dibromoethane	ND	4.8	1.00	
Dibromomethane	ND	4.8	1.00	
1,2-Dichlorobenzene	ND	4.8	1.00	
1,3-Dichlorobenzene	ND	4.8	1.00	
1,4-Dichlorobenzene	ND	4.8	1.00	
Dichlorodifluoromethane	ND	4.8	1.00	
1,1-Dichloroethane	ND	4.8	1.00	
1,2-Dichloroethane	ND	4.8	1.00	
1,1-Dichloroethene	ND	4.8	1.00	
c-1,2-Dichloroethene	ND	4.8	1.00	
t-1,2-Dichloroethene	ND	4.8	1.00	
1,2-Dichloropropane	ND	4.8	1.00	
1,3-Dichloropropane	ND	4.8	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 4 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.8	1.00	
c-1,3-Dichloropropene	ND	4.8	1.00	
t-1,3-Dichloropropene	ND	4.8	1.00	
Ethylbenzene	ND	4.8	1.00	
2-Hexanone	ND	48	1.00	
Isopropylbenzene	ND	4.8	1.00	
p-Isopropyltoluene	ND	4.8	1.00	
Methylene Chloride	ND	48	1.00	
4-Methyl-2-Pentanone	ND	48	1.00	
Naphthalene	ND	48	1.00	
n-Propylbenzene	ND	4.8	1.00	
Styrene	ND	4.8	1.00	
1,1,1,2-Tetrachloroethane	ND	4.8	1.00	
1,1,2,2-Tetrachloroethane	ND	4.8	1.00	
Tetrachloroethene	ND	4.8	1.00	
Toluene	ND	4.8	1.00	
1,2,3-Trichlorobenzene	ND	9.6	1.00	
1,2,4-Trichlorobenzene	ND	4.8	1.00	
1,1,1-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	48	1.00	
Trichloroethene	ND	4.8	1.00	
1,2,3-Trichloropropane	ND	4.8	1.00	
1,2,4-Trimethylbenzene	ND	4.8	1.00	
Trichlorofluoromethane	ND	48	1.00	
1,3,5-Trimethylbenzene	ND	4.8	1.00	
Vinyl Acetate	ND	48	1.00	
Vinyl Chloride	ND	4.8	1.00	
p/m-Xylene	ND	4.8	1.00	
o-Xylene	ND	4.8	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	94	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-003	**14-02-1643-5-A**	**02/24/14 10:53**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 15:33**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 6 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-004	**14-02-1643-6-A**	**02/24/14 10:54**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 16:00**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 8 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	
Dibromofluoromethane	94	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-005	**14-02-1643-7-A**	**02/24/14 10:56**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 16:26**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 10 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-006	**14-02-1643-8-A**	**02/24/14 10:58**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 17:45**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 12 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-007	**14-02-1643-9-A**	**02/24/14 10:59**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 18:12**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 14 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 15 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-008	**14-02-1643-10-A**	**02/24/14 11:00**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 18:38**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 16 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 17 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
567-IV-F/F-SS-009	**14-02-1643-11-A**	**02/24/14 11:02**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 19:05**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 18 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 19 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-001	**14-02-1643-12-A**	**02/24/14 11:10**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 19:32**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 21 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-002	**14-02-1643-13-A**	**02/24/14 11:12**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 19:58**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 22 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	106	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 23 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-003	**14-02-1643-14-A**	**02/24/14 11:13**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 16:52**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 24 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-132	
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 25 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-004	**14-02-1643-15-A**	**02/24/14 11:14**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 16:25**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 26 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	88	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 27 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-005	**14-02-1643-16-A**	**02/24/14 11:15**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 20:24**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.8	1.00	
Bromobenzene	ND	4.8	1.00	
Bromochloromethane	ND	4.8	1.00	
Bromodichloromethane	ND	4.8	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	48	1.00	
n-Butylbenzene	ND	4.8	1.00	
sec-Butylbenzene	ND	4.8	1.00	
tert-Butylbenzene	ND	4.8	1.00	
Carbon Disulfide	ND	48	1.00	
Carbon Tetrachloride	ND	4.8	1.00	
Chlorobenzene	ND	4.8	1.00	
Chloroethane	ND	4.8	1.00	
Chloroform	ND	4.8	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.8	1.00	
4-Chlorotoluene	ND	4.8	1.00	
Dibromochloromethane	ND	4.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.6	1.00	
1,2-Dibromoethane	ND	4.8	1.00	
Dibromomethane	ND	4.8	1.00	
1,2-Dichlorobenzene	ND	4.8	1.00	
1,3-Dichlorobenzene	ND	4.8	1.00	
1,4-Dichlorobenzene	ND	4.8	1.00	
Dichlorodifluoromethane	ND	4.8	1.00	
1,1-Dichloroethane	ND	4.8	1.00	
1,2-Dichloroethane	ND	4.8	1.00	
1,1-Dichloroethene	ND	4.8	1.00	
c-1,2-Dichloroethene	ND	4.8	1.00	
t-1,2-Dichloroethene	ND	4.8	1.00	
1,2-Dichloropropane	ND	4.8	1.00	
1,3-Dichloropropane	ND	4.8	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 28 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.8	1.00	
c-1,3-Dichloropropene	ND	4.8	1.00	
t-1,3-Dichloropropene	ND	4.8	1.00	
Ethylbenzene	ND	4.8	1.00	
2-Hexanone	ND	48	1.00	
Isopropylbenzene	ND	4.8	1.00	
p-Isopropyltoluene	ND	4.8	1.00	
Methylene Chloride	ND	48	1.00	
4-Methyl-2-Pentanone	ND	48	1.00	
Naphthalene	ND	48	1.00	
n-Propylbenzene	ND	4.8	1.00	
Styrene	ND	4.8	1.00	
1,1,1,2-Tetrachloroethane	ND	4.8	1.00	
1,1,2,2-Tetrachloroethane	ND	4.8	1.00	
Tetrachloroethene	ND	4.8	1.00	
Toluene	ND	4.8	1.00	
1,2,3-Trichlorobenzene	ND	9.6	1.00	
1,2,4-Trichlorobenzene	ND	4.8	1.00	
1,1,1-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	48	1.00	
Trichloroethene	ND	4.8	1.00	
1,2,3-Trichloropropane	ND	4.8	1.00	
1,2,4-Trimethylbenzene	ND	4.8	1.00	
Trichlorofluoromethane	ND	48	1.00	
1,3,5-Trimethylbenzene	ND	4.8	1.00	
Vinyl Acetate	ND	48	1.00	
Vinyl Chloride	ND	4.8	1.00	
p/m-Xylene	ND	4.8	1.00	
o-Xylene	ND	4.8	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 29 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-006	**14-02-1643-17-A**	**02/24/14 11:16**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 20:51**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 31 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-007	**14-02-1643-18-A**	**02/24/14 11:18**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 20:00**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 32 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	91	63-141	
1,2-Dichloroethane-d4	94	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 33 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-008	**14-02-1643-19-A**	**02/24/14 11:19**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 20:27**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 34 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	89	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 35 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
568-IV-F/F-SS-009	**14-02-1643-20-A**	**02/24/14 11:20**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 20:54**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 36 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	87	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 37 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-001	**14-02-1643-21-A**	**02/24/14 11:25**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 21:21**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 38 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	87	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 39 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
566-IV-F/F-SS-002	**14-02-1643-22-A**	**02/24/14 11:26**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 21:48**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 40 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	92	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 41 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8199**	**N/A**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 11:50**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 42 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 43 of 44

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8201**	**N/A**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 15:31**	**140225L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/24/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1643
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030		Page 44 of 44

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	88	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#855	**Sample**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 15:14**	**140225S03**
#855	**Matrix Spike**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 14:40**	**140225S03**
#855	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 14:57**	**140225S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	3411	400.0	2632	0	2619	0	64-130	1	0-15	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1642-9	**Sample**	**Solid**	**GC 48**	**02/25/14**	**02/26/14 01:13**	**140225S02**
14-02-1642-9	**Matrix Spike**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 22:36**	**140225S02**
14-02-1642-9	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 22:52**	**140225S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	182.2	400.0	572.0	97	569.9	97	64-130	0	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
567-IV-F/F-SS-004	**Sample**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:48**	**140225S02**
567-IV-F/F-SS-004	**Matrix Spike**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:43**	**140225S02**
567-IV-F/F-SS-004	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**02/25/14**	**02/25/14 16:44**	**140225S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	3.897	16	4.339	17	50-115	11	0-20	3
Arsenic	2.191	25.00	26.42	97	26.20	96	75-125	1	0-20	
Barium	88.31	25.00	108.7	82	106.4	73	75-125	2	0-20	3
Beryllium	0.3165	25.00	25.93	102	25.87	102	75-125	0	0-20	
Cadmium	ND	25.00	24.92	100	25.00	100	75-125	0	0-20	
Chromium	10.93	25.00	35.90	100	34.94	96	75-125	3	0-20	
Cobalt	7.810	25.00	33.36	102	33.38	102	75-125	0	0-20	
Copper	16.68	25.00	40.58	96	39.31	91	75-125	3	0-20	
Lead	4.866	25.00	29.66	99	31.13	105	75-125	5	0-20	
Molybdenum	ND	25.00	23.33	93	23.33	93	75-125	0	0-20	
Nickel	8.300	25.00	33.39	100	32.54	97	75-125	3	0-20	
Selenium	ND	25.00	22.48	90	23.47	94	75-125	4	0-20	
Silver	ND	12.50	13.05	104	13.02	104	75-125	0	0-20	
Thallium	ND	25.00	11.89	48	13.35	53	75-125	12	0-20	3
Vanadium	24.39	25.00	48.46	96	46.46	88	75-125	4	0-20	
Zinc	41.74	25.00	66.23	98	61.85	80	75-125	7	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
567-IV-F/F-SS-004	**Sample**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:47**	**140225S03**
567-IV-F/F-SS-004	**Matrix Spike**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:49**	**140225S03**
567-IV-F/F-SS-004	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:51**	**140225S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8319	100	0.8229	99	71-137	1	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
568-IV-F/F-SS-009	**Sample**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 02:37**	**140224S15**
568-IV-F/F-SS-009	**Matrix Spike**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 03:13**	**140224S15**
568-IV-F/F-SS-009	**Matrix Spike Duplicate**	**Solid**	**GC 66**	**02/24/14**	**02/26/14 03:30**	**140224S15**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	104.6	105	109.5	109	50-135	5	0-25	
Aroclor-1260	ND	100.0	88.78	89	96.02	96	50-135	8	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
567-IV-F/F-SS-001	**Sample**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 13:23**	**140225S01**
567-IV-F/F-SS-001	**Matrix Spike**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 13:49**	**140225S01**
567-IV-F/F-SS-001	**Matrix Spike Duplicate**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 16:52**	**140225S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	37.54	375	40.97	410	61-127	9	0-20	3
Carbon Tetrachloride	ND	10.00	33.87	339	37.71	377	51-135	11	0-29	3
Chlorobenzene	ND	10.00	40.25	402	45.05	451	57-123	11	0-20	3
1,2-Dibromoethane	ND	10.00	38.40	384	43.33	433	64-124	12	0-20	3
1,2-Dichlorobenzene	ND	10.00	36.90	369	44.83	448	35-131	19	0-25	3
1,2-Dichloroethane	ND	10.00	40.29	403	45.05	450	80-120	11	0-20	3
1,1-Dichloroethene	ND	10.00	40.84	408	45.10	451	47-143	10	0-25	3
Ethylbenzene	ND	10.00	40.06	401	44.55	446	57-129	11	0-22	3
Toluene	ND	10.00	38.58	386	42.87	429	63-123	11	0-20	3
Trichloroethene	ND	10.00	39.30	393	43.32	433	44-158	10	0-20	3
Vinyl Chloride	ND	10.00	36.93	369	42.34	423	49-139	14	0-47	3
p/m-Xylene	ND	20.00	80.77	404	90.20	451	70-130	11	0-30	3
o-Xylene	ND	10.00	41.35	414	45.40	454	70-130	9	0-30	3
Methyl-t-Butyl Ether (MTBE)	ND	10.00	35.38	354	39.94	399	57-123	12	0-21	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
568-IV-F/F-SS-004	**Sample**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 16:25**	**140225S01**
568-IV-F/F-SS-004	**Matrix Spike**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 17:47**	**140225S01**
568-IV-F/F-SS-004	**Matrix Spike Duplicate**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 18:14**	**140225S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	43.39	87	42.47	85	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	42.06	84	42.77	86	51-135	2	0-29	
Chlorobenzene	ND	50.00	46.49	93	45.78	92	57-123	2	0-20	
1,2-Dibromoethane	ND	50.00	45.71	91	44.89	90	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	45.73	91	43.94	88	35-131	4	0-25	
1,2-Dichloroethane	ND	50.00	42.78	86	41.74	83	80-120	2	0-20	
1,1-Dichloroethene	ND	50.00	48.59	97	48.17	96	47-143	1	0-25	
Ethylbenzene	ND	50.00	45.99	92	45.42	91	57-129	1	0-22	
Toluene	ND	50.00	45.29	91	44.45	89	63-123	2	0-20	
Trichloroethene	ND	50.00	48.43	97	47.84	96	44-158	1	0-20	
Vinyl Chloride	ND	50.00	50.87	102	53.65	107	49-139	5	0-47	
p/m-Xylene	ND	100.0	91.24	91	89.81	90	70-130	2	0-30	
o-Xylene	ND	50.00	46.27	93	45.82	92	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	44.39	89	44.26	89	57-123	0	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-786	**LCS**	**Solid**	**GC 47**	**02/25/14**	**02/25/14 14:23**	**140225B03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	349.4	87	75-123	

RPD: Relative Percent Difference. CL: Control Limits

Return to Contents

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-789	**LCS**	**Solid**	**GC 48**	**02/25/14**	**02/25/14 22:21**	**140225B02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	369.4	92	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18068	**LCS**	**Solid**	**ICP 7300**	**02/25/14**	**02/26/14 11:50**	**140225L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.94	104	80-120	73-127	
Arsenic	25.00	25.55	102	80-120	73-127	
Barium	25.00	26.39	106	80-120	73-127	
Beryllium	25.00	25.55	102	80-120	73-127	
Cadmium	25.00	26.90	108	80-120	73-127	
Chromium	25.00	26.57	106	80-120	73-127	
Cobalt	25.00	29.00	116	80-120	73-127	
Copper	25.00	27.15	109	80-120	73-127	
Lead	25.00	27.21	109	80-120	73-127	
Molybdenum	25.00	26.56	106	80-120	73-127	
Nickel	25.00	28.56	114	80-120	73-127	
Selenium	25.00	25.06	100	80-120	73-127	
Silver	12.50	13.69	110	80-120	73-127	
Thallium	25.00	27.91	112	80-120	73-127	
Vanadium	25.00	25.49	102	80-120	73-127	
Zinc	25.00	26.13	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-49	**LCS**	**Solid**	**Mercury**	**02/25/14**	**02/25/14 12:33**	**140225L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8345	100	85-121	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-201	**LCS**	**Solid**	**GC 66**	**02/24/14**	**02/25/14 20:41**	**140224L15**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	95.54	96	50-135	
Aroclor-1260	100.0	76.57	77	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-025-24930	**LCS**	**Solid**	**GC/MS Z**	**02/25/14**	**02/25/14 10:29**	**140225L01**
095-01-025-24930	**LCSD**	**Solid**	**GC/MS Z**	**02/25/14**	**02/25/14 10:56**	**140225L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	50.54	101	49.88	100	80-120	73-127	1	0-20	
Carbon Tetrachloride	50.00	66.48	133	64.43	129	65-137	53-149	3	0-20	
Chlorobenzene	50.00	50.16	100	49.67	99	80-120	73-127	1	0-20	
1,2-Dibromoethane	50.00	48.44	97	50.35	101	80-120	73-127	4	0-20	
1,2-Dichlorobenzene	50.00	49.37	99	48.71	97	80-120	73-127	1	0-20	
1,2-Dichloroethane	50.00	56.42	113	55.63	111	80-120	73-127	1	0-20	
1,1-Dichloroethene	50.00	55.63	111	54.46	109	68-128	58-138	2	0-20	
Ethylbenzene	50.00	49.36	99	48.72	97	80-120	73-127	1	0-20	
Toluene	50.00	52.29	105	51.32	103	80-120	73-127	2	0-20	
Trichloroethene	50.00	53.34	107	52.11	104	80-120	73-127	2	0-20	
Vinyl Chloride	50.00	55.03	110	54.72	109	67-127	57-137	1	0-20	
p/m-Xylene	100.0	98.20	98	97.60	98	75-125	67-133	1	0-25	
o-Xylene	50.00	50.59	101	50.54	101	75-125	67-133	0	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	50.37	101	49.84	100	70-124	61-133	1	0-20	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8199	**LCS**	**Solid**	**GC/MS Q**	**02/25/14**	**02/25/14 10:38**	**140225L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	43.90	88	78-120	71-127	
Carbon Tetrachloride	50.00	41.44	83	49-139	34-154	
Chlorobenzene	50.00	50.73	101	79-120	72-127	
1,2-Dibromoethane	50.00	48.90	98	80-120	73-127	
1,2-Dichlorobenzene	50.00	50.35	101	75-120	68-128	
1,2-Dichloroethane	50.00	48.76	98	80-120	73-127	
1,1-Dichloroethene	50.00	47.17	94	74-122	66-130	
Ethylbenzene	50.00	48.08	96	76-120	69-127	
Toluene	50.00	45.35	91	77-120	70-127	
Trichloroethene	50.00	45.87	92	80-120	73-127	
Vinyl Chloride	50.00	50.77	102	68-122	59-131	
p/m-Xylene	100.0	97.99	98	75-125	67-133	
o-Xylene	50.00	49.55	99	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	44.04	88	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8201	**LCS**	**Solid**	**GC/MS BB**	**02/25/14**	**02/25/14 14:33**	**140225L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	48.09	96	78-120	71-127	
Carbon Tetrachloride	50.00	49.20	98	49-139	34-154	
Chlorobenzene	50.00	51.42	103	79-120	72-127	
1,2-Dibromoethane	50.00	49.38	99	80-120	73-127	
1,2-Dichlorobenzene	50.00	51.94	104	75-120	68-128	
1,2-Dichloroethane	50.00	48.29	97	80-120	73-127	
1,1-Dichloroethene	50.00	53.28	107	74-122	66-130	
Ethylbenzene	50.00	50.56	101	76-120	69-127	
Toluene	50.00	49.44	99	77-120	70-127	
Trichloroethene	50.00	54.53	109	80-120	73-127	
Vinyl Chloride	50.00	56.14	112	68-122	59-131	
p/m-Xylene	100.0	100.4	100	75-125	67-133	
o-Xylene	50.00	51.43	103	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	48.77	98	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-02-1643

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	914	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 66	1
EPA 8260B	EPA 5035	796	GC/MS Z	2
EPA 8260B	EPA 5030C	715	GC/MS Q	2
EPA 8260B	EPA 5030C	823	GC/MS BB	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-02-1643 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25762

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 2/24/14 PAGE 1 OF 2

PROJECT NUMBER: 0106270030

RESULTS TO: L. Conlan

TURNAROUND TIME: Rush

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Cal Science

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nauck

LABORATORY PHONE NUMBER: 714 895 5495

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

14-02-1643

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	TPH EPA 8015	VOC EPA 8260	PCBs EPA 8082	Metals EPA 6010/7000	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2/24/14	0720	#854	X	X			*	S		*	X		~~1~~ 5	
2	2/24/14	0735	#855	X	X			*	S		*	X		~~1~~ 5	
3		1045	567-IV-F/F-SS-001	X	X	X	X	4oz glass	S		—	✓		1	
4		1050	567-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	
5		1053	567-IV-F/F-SS-003	X	X	X	X		S		—	✓		1	
6		~~1055~~ 1054	567-IV-F/F-SS-004	X	X	X	X		S		—	✓		1	
7		~~1100~~ 1056	567-IV-F/F-SS-005	X	X	X	X		S		—	✓		1	
8		1058	567-IV-F/F-SS-006	X	X	X	X		S		—	✓		1	
9		1059	567-IV-F/F-SS-007	X	X	X	X		S		—	✓		1	
10		1100	567-IV-F/F-SS-008	X	X	X	X		S		—	✓		1	
11		1102	567-IV-F/F-SS-009	X	X	X	X		S		—	✓		1	
12		1110	568-IV-F/F-SS-001	X	X	X	X		S		—	✓		1	
13		1112	568-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	
14		1113	568-IV-F/F-SS-003	X	X	X	X		S		—	✓		1	
15		1114	568-IV-F/F-SS-004	X	X	X	X		S		—	✓		1	

TOTAL NUMBER OF CONTAINERS: 23

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Jorge Perez COMPANY: Amec	2/24/14	1530	SIGNATURE: [signature] PRINTED NAME: RUDY HIGA COMPANY: CEL	2/24/14	1530
SIGNATURE: [signature] PRINTED NAME: RUDY HIGA COMPANY: CEL	2/24/14	1730	SIGNATURE: [signature] PRINTED NAME: DANNY LE COMPANY: CEL	2/24/14	17:30
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

SAMPLING COMMENTS:

#1 4oz Jar (no preservative)
2 40mL VOA (SODI preservative)
1 40mL VOA (MeOH)
1 oz plastic (no preservative)
QCTB-022414 on COC 25728 pertains to samples on COC # 25762 and 27107

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474
amec

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CHAIN-OF-CUSTODY RECORD

NB 27407

PROJECT NAME: Former Richmond Cast Plate Inc Facility		DATE: 2/24/14	PAGE 2 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS: 1643
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: Rush			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 714 895 5494		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

	DATE	TIME	SAMPLE NUMBER	TPHg EPA 8015M	VOCs EPA 8260B	Metals EPA 6010/7470	PCBs EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	2/24/14	1115	568-IV-F/F-SS-005	X	X	X	X	4oz jar	S		—	✓		1	
17		1116	568-IV-F/F-SS-006	X	X	X	X		S		—	✓		1	
18		1118	568-IV-F/F-SS-007	X	X	X	X		S		—	✓		1	
19		1119	568-IV-F/F-SS-008	X	X	X	X		S		—	✓		1	
20		1120	568-IV-F/F-SS-009	X	X	X	X		S		—	✓		1	
21		1125	566-IV-F/F-SS-001	X	X	X	X		S		—	✓		1	
22		1126	566-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	2/24/14	1530	SIGNATURE: [signature]	2/24/14	1530
PRINTED NAME: Jorge Perez			PRINTED NAME: RUDY MIGA		
COMPANY: AMEC			COMPANY: CEL		
SIGNATURE: [signature]	2/24/14	1730	SIGNATURE:		
PRINTED NAME: RUDY MIGA			PRINTED NAME:		
COMPANY: CEL			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

See notes (page 1 of 2)

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02-1 6 4 3

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 02/24/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 876

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☑(3)TerraCores® ☑ 80 ml PJ (1-2)

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 876

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

Supplemental Report 2

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-02-1643

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 02/28/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate / 0106270030
Work Order Number: 14-02-1643

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5 Quality Control Sample Data. 8
5.1 LCS/LCSD. 8

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7 Chain of Custody/Sample Receipt Form. 10

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-02-1643 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/24/14. They were assigned to Work Order 14-02-1643.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1643
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	02/24/14 17:30
		Number of Containers:	30
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#855	14-02-1643-2	02/24/14 07:35	5	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1643
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	02/24/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#855 (14-02-1643-2)						
C17-C18	71		49	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	280		49	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	900		49	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	480		49	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	80		49	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	87		49	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2000		49	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#855	**14-02-1643-2-A**	**02/24/14 07:35**	**Solid**	**GC 45**	**02/27/14**	**02/27/14 15:47**	**140227B05**

Comment(s): - The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qualifiers
C6	ND	49	9.80	
C7	ND	49	9.80	
C8	ND	49	9.80	
C9-C10	ND	49	9.80	
C11-C12	ND	49	9.80	
C13-C14	ND	49	9.80	
C15-C16	ND	49	9.80	
C17-C18	71	49	9.80	
C19-C20	ND	49	9.80	
C21-C22	ND	49	9.80	
C23-C24	ND	49	9.80	
C25-C28	280	49	9.80	
C29-C32	900	49	9.80	
C33-C36	480	49	9.80	
C37-C40	80	49	9.80	
C41-C44	87	49	9.80	
C6-C44 Total	2000	49	9.80	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	133	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-796**	**N/A**	**Solid**	**GC 45**	**02/27/14**	**02/27/14 14:33**	**140227B05**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	119	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/24/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1643
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-796	**LCS**	**Solid**	**GC 45**	**02/27/14**	**02/27/14 14:51**	**140227B05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	384.3	96	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-02-1643

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25762

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 2/24/14 PAGE 1 OF 2

PROJECT NUMBER: 0106270030

RESULTS TO: L. Conlan

TURNAROUND TIME: Rush

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Cal Science

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nauck

LABORATORY PHONE NUMBER: 714 895 5495

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

14-02-1643

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	TPH EPA 8015	VOC EPA 8260	PCBs EPA 8082	Metals EPA 6010/7000	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2/24/14	0720	#854	X	X			*	S		*	X		~~1~~ 5	
2	2/24/14	0735	#855	X	X			*	S		*	X		~~1~~ 5	
3		1045	567-IV-F/F-SS-001	X	X	X	X	4oz glass	S		—	✓		1	
4		1050	567-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	
5		1053	567-IV-F/F-SS-003	X	X	X	X		S		—	✓		1	
6		~~1055~~ 1054	567-IV-F/F-SS-004	X	X	X	X		S		—	✓		1	
7		~~1100~~ 1056	567-IV-F/F-SS-005	X	X	X	X		S		—	✓		1	
8		1058	567-IV-F/F-SS-006	X	X	X	X		S		—	✓		1	
9		1059	567-IV-F/F-SS-007	X	X	X	X		S		—	✓		1	
10		1100	567-IV-F/F-SS-008	X	X	X	X		S		—	✓		1	
11		1102	567-IV-F/F-SS-009	X	X	X	X		S		—	✓		1	
12		1110	568-IV-F/F-SS-001	X	X	X	X		S		—	✓		1	
13		1112	568-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	
14		1113	568-IV-F/F-SS-003	X	X	X	X		S		—	✓		1	
15		1114	568-IV-F/F-SS-004	X	X	X	X		S		—	✓		1	

TOTAL NUMBER OF CONTAINERS: 23

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Jorge Perez COMPANY: Amec	2/24/14	1530	SIGNATURE: [signature] PRINTED NAME: RUDY HIGA COMPANY: CEL	2/24/14	1530
SIGNATURE: [signature] PRINTED NAME: RUDY HIGA COMPANY: CEL	2/24/14	1730	SIGNATURE: [signature] PRINTED NAME: DANNY LE COMPANY: CEL	2/24/14	17:30
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

SAMPLING COMMENTS:

#1 4oz Jar (no preservative)
2 40mL VOA (SODI preservative)
1 40mL VOA (MeOH)
1 oz plastic (no preservative)
QCTB-022414 on COC 25728 pertains to samples on COC # 25762 and 25727

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 27407

PROJECT NAME: Former Richmey Cast Plate Inc Facility		DATE: 2/24/14	PAGE 2 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		(1643)
TURNAROUND TIME: Rush			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 714 895 5494		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	TPHg EPA 8015M	VOCs EPA 8260B	Metals EPA 6010/7000	PCBs EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	2/24/14	1115	568-IV-F/F-SS-005	X	X	X	X	4oz jar	S		—	✓		1	
17		1116	568-IV-F/F-SS-006	X	X	X	X		S		—	✓		1	
18		1118	568-IV-F/F-SS-007	X	X	X	X		S		—	✓		1	
19		1119	568-IV-F/F-SS-008	X	X	X	X		S		—	✓		1	
20		1120	568-IV-F/F-SS-009	X	X	X	X		S		—	✓		1	
21		1125	566-IV-F/F-SS-001	X	X	X	X		S		—	✓		1	
22		1126	566-IV-F/F-SS-002	X	X	X	X		S		—	✓		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	2/24/14	1530	SIGNATURE: [signature]	2/24/14	1530
PRINTED NAME: Jorge Perez			PRINTED NAME: RUDY MIGA		
COMPANY: AMEC			COMPANY: CEL		
SIGNATURE: [signature]	2/24/14	1730	SIGNATURE:		
PRINTED NAME: RUDY MIGA			PRINTED NAME:		
COMPANY: CEL			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

See notes (page 1 of 2)

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02-1 6 4 3

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 02/24/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 876

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☑(3)TerraCores® ☑80 ml PJ (1-2)

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 876

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na$_2$: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Thursday, February 27, 2014 8:59 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate / 0106270030 / CEL 14-02-1643

Steve,
Could you re-run sample #855 by 8015 with a silica gel clean-up?

From: Stephen Nowak [snowak@calscience.com]
Sent: Wednesday, February 26, 2014 5:56 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate / 0106270030 / CEL 14-02-1643

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience

7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-02-1721

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 02/28/2014 by:
Stephen Nowak
Project Manager

ResultLink

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Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-02-1721

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-02-1721 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/25/14. They were assigned to Work Order 14-02-1721.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1721
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		PO Number:	
		Date/Time Received:	02/25/14 16:53
		Number of Containers:	26
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
570-IV-P/S-O-001	14-02-1721-1	02/25/14 09:00	1	Other
570-IV-P/S-CS-001	14-02-1721-2	02/25/14 09:05	1	Other
570-IV-P/S-CS-002	14-02-1721-3	02/25/14 09:15	1	Other
DC-396	14-02-1721-4	02/25/14 09:30	1	Other
#856	14-02-1721-5	02/25/14 11:31	1	Solid
#857	14-02-1721-6	02/25/14 11:32	1	Solid
#858	14-02-1721-7	02/25/14 11:33	1	Solid
#859	14-02-1721-8	02/25/14 11:34	1	Solid
#860	14-02-1721-9	02/25/14 11:35	1	Solid
#861	14-02-1721-10	02/25/14 11:36	1	Solid
#862	14-02-1721-11	02/25/14 11:37	1	Solid
#863	14-02-1721-12	02/25/14 11:38	1	Solid
#864	14-02-1721-13	02/25/14 09:45	1	Solid
142-I-P/S-CS-005	14-02-1721-14	02/25/14 13:10	1	Other
142-I-P/S-CS-006	14-02-1721-15	02/25/14 13:15	1	Other
142-I-P/S-CS-007	14-02-1721-16	02/25/14 13:20	1	Other
142-I-P/S-CS-008	14-02-1721-17	02/25/14 13:35	1	Other
142-I-P/S-CS-009	14-02-1721-18	02/25/14 13:40	1	Other
142-I-P/S-CS-010	14-02-1721-19	02/25/14 13:50	1	Other
571-IIIA-P/S-O-001	14-02-1721-20	02/25/14 14:20	6	Aqueous
#865	14-02-1721-21	02/25/14 14:37	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1721
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	02/25/14
Attn:	Linda Conlan		Page 1 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
570-IV-P/S-O-001 (14-02-1721-1)						
Arsenic	15.3		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	113		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.366		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.0		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.92		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	72.6		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	18.6		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.9		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.8		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	87.7		0.990	mg/kg	EPA 6010B	EPA 3050B
C29-C32	11		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	15		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	12		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	41		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	100		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	120		50	ug/kg	EPA 8082	EPA 3540C
570-IV-P/S-CS-001 (14-02-1721-2)						
Aroclor-1248	52		50	ug/kg	EPA 8082	EPA 3540C
DC-396 (14-02-1721-4)						
Aroclor-1248	250		50	ug/kg	EPA 8082	EPA 3540C
#856 (14-02-1721-5)						
Arsenic	4.76		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	122		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.331		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	11.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	28.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	59.5		1.00	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1721
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	02/25/14
Attn:	Linda Conlan		Page 2 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#857 (14-02-1721-6)						
Arsenic	4.59		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	144		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.393		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.6		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.3		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	17.5		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	32.4		0.510	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.6		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.1		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	74.4		1.02	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.210		0.0833	mg/kg	EPA 7471A	EPA 7471A Total
#858 (14-02-1721-7)						
Arsenic	2.11		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	138		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.383		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	26.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	40.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	106		1.00	mg/kg	EPA 6010B	EPA 3050B
#859 (14-02-1721-8)						
Arsenic	0.792		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	115		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.319		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.5		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.99		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	15.9		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	4.92		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.64		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.6		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	47.1		0.995	mg/kg	EPA 6010B	EPA 3050B

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1721
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	02/25/14
Attn:	Linda Conlan		Page 3 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#860 (14-02-1721-9)						
Arsenic	2.01		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	118		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.333		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.9		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.1		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	31.7		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	11.0		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.2		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.1		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	52.0		0.985	mg/kg	EPA 6010B	EPA 3050B
#861 (14-02-1721-10)						
Arsenic	2.07		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	177		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.418		0.251	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.5		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.0		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	58.3		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	98.3		0.503	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.5		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.0		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	229		1.01	mg/kg	EPA 6010B	EPA 3050B
#862 (14-02-1721-11)						
Arsenic	4.11		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	127		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.365		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.9		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.1		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	19.4		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	15.8		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.5		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.5		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	62.5		1.02	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1721
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	02/25/14
Attn:	Linda Conlan		Page 4 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#863 (14-02-1721-12)						
Arsenic	1.40		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	144		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.409		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.3		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.0		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	21.3		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	5.64		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.3		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.7		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	64.1		0.980	mg/kg	EPA 6010B	EPA 3050B
#864 (14-02-1721-13)						
Arsenic	2.04		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	122		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.616		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.2		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.0		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	16.8		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	5.78		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.1		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.3		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	46.6		0.980	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0939		0.0847	mg/kg	EPA 7471A	EPA 7471A Total

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1721
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	02/25/14
Attn:	Linda Conlan		Page 5 of 5

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
571-IIIA-P/S-O-001 (14-02-1721-20)						
Barium	3.43		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Chromium	0.0158		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Copper	0.0598		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Lead	0.0306		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Molybdenum	0.0108		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Nickel	0.0153		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Vanadium	0.0455		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Zinc	2.33		0.0100	mg/L	EPA 6010B	EPA 3010A Total
C13-C14	110		100	ug/L	EPA 8015B (M)	EPA 3510C
C15-C16	210		100	ug/L	EPA 8015B (M)	EPA 3510C
C17-C18	330		100	ug/L	EPA 8015B (M)	EPA 3510C
C19-C20	350		100	ug/L	EPA 8015B (M)	EPA 3510C
C21-C22	180		100	ug/L	EPA 8015B (M)	EPA 3510C
C23-C24	170		100	ug/L	EPA 8015B (M)	EPA 3510C
C6-C44 Total	1600		100	ug/L	EPA 8015B (M)	EPA 3510C
Naphthalene	34		10	ug/L	EPA 8260B	EPA 5030C
#865 (14-02-1721-21)						
Arsenic	1.17		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	136		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.470		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.5		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	21.5		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	7.19		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.520		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.1		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.1		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	61.7		1.01	mg/kg	EPA 6010B	EPA 3050B
C6-C44 Total	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
570-IV-P/S-O-001	**14-02-1721-1-A**	**02/25/14 09:00**	**Other**	**GC 46**	**02/26/14**	**02/26/14 20:08**	**140226B07**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	11	4.9	0.980	
C33-C36	15	4.9	0.980	
C37-C40	12	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	41	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	87	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#865	**14-02-1721-21-A**	**02/25/14 14:37**	**Solid**	**GC 46**	**02/26/14**	**02/27/14 13:48**	**140226B07**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	16	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-793**	**N/A**	**Solid**	**GC 46**	**02/26/14**	**02/26/14 18:58**	**140226B07**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	103	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
571-IIIA-P/S-O-001	**14-02-1721-20-D**	**02/25/14 14:20**	**Aqueous**	**GC 45**	**02/26/14**	**02/26/14 13:53**	**140226B06**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1.00	
C7	ND	100	1.00	
C8	ND	100	1.00	
C9-C10	ND	100	1.00	
C11-C12	ND	100	1.00	
C13-C14	110	100	1.00	
C15-C16	210	100	1.00	
C17-C18	330	100	1.00	
C19-C20	350	100	1.00	
C21-C22	180	100	1.00	
C23-C24	170	100	1.00	
C25-C28	ND	100	1.00	
C29-C32	ND	100	1.00	
C33-C36	ND	100	1.00	
C37-C40	ND	100	1.00	
C41-C44	ND	100	1.00	
C6-C44 Total	1600	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	68-140	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-498-146**	**N/A**	**Aqueous**	**GC 45**	**02/26/14**	**02/26/14 12:59**	**140226B06**

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1.00	
C7	ND	100	1.00	
C8	ND	100	1.00	
C9-C10	ND	100	1.00	
C11-C12	ND	100	1.00	
C13-C14	ND	100	1.00	
C15-C16	ND	100	1.00	
C17-C18	ND	100	1.00	
C19-C20	ND	100	1.00	
C21-C22	ND	100	1.00	
C23-C24	ND	100	1.00	
C25-C28	ND	100	1.00	
C29-C32	ND	100	1.00	
C33-C36	ND	100	1.00	
C37-C40	ND	100	1.00	
C41-C44	ND	100	1.00	
C6-C44 Total	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	116	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
570-IV-P/S-O-001	**14-02-1721-1-A**	**02/25/14 09:00**	**Other**	**ICP 7300**	**02/26/14**	**02/27/14 00:02**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	15.3	0.743	0.990	
Barium	113	0.495	0.990	
Beryllium	0.366	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	15.0	0.248	0.990	
Cobalt	8.92	0.248	0.990	
Copper	72.6	0.495	0.990	
Lead	18.6	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	12.9	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	29.8	0.248	0.990	
Zinc	87.7	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#856	**14-02-1721-5-A**	**02/25/14 11:31**	**Solid**	**ICP 7300**	**02/26/14**	**02/26/14 19:12**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	4.76	0.750	1.00	
Barium	122	0.500	1.00	
Beryllium	0.331	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	14.0	0.250	1.00	
Cobalt	10.4	0.250	1.00	
Copper	11.7	0.500	1.00	
Lead	28.3	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	10.9	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	31.0	0.250	1.00	
Zinc	59.5	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#857	**14-02-1721-6-A**	**02/25/14 11:32**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:03**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	4.59	0.765	1.02	
Barium	144	0.510	1.02	
Beryllium	0.393	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	17.6	0.255	1.02	
Cobalt	11.3	0.255	1.02	
Copper	17.5	0.510	1.02	
Lead	32.4	0.510	1.02	
Molybdenum	ND	0.255	1.02	
Nickel	12.6	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	34.1	0.255	1.02	
Zinc	74.4	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#858	**14-02-1721-7-A**	**02/25/14 11:33**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:09**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	2.11	0.750	1.00	
Barium	138	0.500	1.00	
Beryllium	0.383	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	15.1	0.250	1.00	
Cobalt	10.4	0.250	1.00	
Copper	26.3	0.500	1.00	
Lead	40.6	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	11.7	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	34.0	0.250	1.00	
Zinc	106	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#859	**14-02-1721-8-A**	**02/25/14 11:34**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:10**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	0.792	0.746	0.995	
Barium	115	0.498	0.995	
Beryllium	0.319	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	12.5	0.249	0.995	
Cobalt	8.99	0.249	0.995	
Copper	15.9	0.498	0.995	
Lead	4.92	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	9.64	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	28.6	0.249	0.995	
Zinc	47.1	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#860	**14-02-1721-9-A**	**02/25/14 11:35**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:11**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	2.01	0.739	0.985	
Barium	118	0.493	0.985	
Beryllium	0.333	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	14.9	0.246	0.985	
Cobalt	10.1	0.246	0.985	
Copper	31.7	0.493	0.985	
Lead	11.0	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	11.2	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	31.1	0.246	0.985	
Zinc	52.0	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#861	**14-02-1721-10-A**	**02/25/14 11:36**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:12**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	2.07	0.754	1.01	
Barium	177	0.503	1.01	
Beryllium	0.418	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	16.5	0.251	1.01	
Cobalt	11.0	0.251	1.01	
Copper	58.3	0.503	1.01	
Lead	98.3	0.503	1.01	
Molybdenum	ND	0.251	1.01	
Nickel	13.5	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	36.0	0.251	1.01	
Zinc	229	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#862	**14-02-1721-11-A**	**02/25/14 11:37**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:13**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	4.11	0.761	1.02	
Barium	127	0.508	1.02	
Beryllium	0.365	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	16.9	0.254	1.02	
Cobalt	11.1	0.254	1.02	
Copper	19.4	0.508	1.02	
Lead	15.8	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	13.5	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	33.5	0.254	1.02	
Zinc	62.5	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#863	**14-02-1721-12-A**	**02/25/14 11:38**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:14**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	1.40	0.735	0.980	
Barium	144	0.490	0.980	
Beryllium	0.409	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	17.3	0.245	0.980	
Cobalt	12.0	0.245	0.980	
Copper	21.3	0.490	0.980	
Lead	5.64	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	13.3	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	36.7	0.245	0.980	
Zinc	64.1	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#864	**14-02-1721-13-A**	**02/25/14 09:45**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:15**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	2.04	0.735	0.980	
Barium	122	0.490	0.980	
Beryllium	0.616	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	18.2	0.245	0.980	
Cobalt	11.0	0.245	0.980	
Copper	16.8	0.490	0.980	
Lead	5.78	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	12.1	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	38.3	0.245	0.980	
Zinc	46.6	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 11 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#865	**14-02-1721-21-A**	**02/25/14 14:37**	**Solid**	**ICP 7300**	**02/26/14**	**02/27/14 00:16**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	1.17	0.758	1.01	
Barium	136	0.505	1.01	
Beryllium	0.470	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	17.2	0.253	1.01	
Cobalt	11.5	0.253	1.01	
Copper	21.5	0.505	1.01	
Lead	7.19	0.505	1.01	
Molybdenum	0.520	0.253	1.01	
Nickel	13.1	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	39.1	0.253	1.01	
Zinc	61.7	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 12 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18074**	**N/A**	**Solid**	**ICP 7300**	**02/26/14**	**02/26/14 19:09**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
571-IIIA-P/S-O-001	**14-02-1721-20-E**	**02/25/14 14:20**	**Aqueous**	**ICP 7300**	**02/26/14**	**02/26/14 21:06**	**140226LA5**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1.00	
Arsenic	ND	0.0100	1.00	
Barium	3.43	0.0100	1.00	
Beryllium	ND	0.0100	1.00	
Cadmium	ND	0.0100	1.00	
Chromium	0.0158	0.0100	1.00	
Cobalt	ND	0.0100	1.00	
Copper	0.0598	0.0100	1.00	
Lead	0.0306	0.0100	1.00	
Molybdenum	0.0108	0.0100	1.00	
Nickel	0.0153	0.0100	1.00	
Selenium	ND	0.0150	1.00	
Silver	ND	0.00500	1.00	
Thallium	ND	0.0150	1.00	
Vanadium	0.0455	0.0100	1.00	
Zinc	2.33	0.0100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-003-14052**	**N/A**	**Aqueous**	**ICP 7300**	**02/26/14**	**02/26/14 20:59**	**140226LA5**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1.00	
Arsenic	ND	0.0100	1.00	
Barium	ND	0.0100	1.00	
Beryllium	ND	0.0100	1.00	
Cadmium	ND	0.0100	1.00	
Chromium	ND	0.0100	1.00	
Cobalt	ND	0.0100	1.00	
Copper	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	
Molybdenum	ND	0.0100	1.00	
Nickel	ND	0.0100	1.00	
Selenium	ND	0.0150	1.00	
Silver	ND	0.00500	1.00	
Thallium	ND	0.0150	1.00	
Vanadium	ND	0.0100	1.00	
Zinc	ND	0.0100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
571-IIIA-P/S-O-001	**14-02-1721-20-E**	**02/25/14 14:20**	**Aqueous**	**Mercury**	**02/26/14**	**02/27/14 13:15**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1.00	

Method Blank	**099-04-008-6853**	**N/A**	**Aqueous**	**Mercury**	**02/26/14**	**02/26/14 16:30**	**140226L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
570-IV-P/S-O-001	**14-02-1721-1-A**	**02/25/14 09:00**	**Other**	**Mercury**	**02/26/14**	**02/26/14 11:20**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

#856	**14-02-1721-5-A**	**02/25/14 11:31**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:23**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#857	**14-02-1721-6-A**	**02/25/14 11:32**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:29**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.210	0.0833	1.00	

#858	**14-02-1721-7-A**	**02/25/14 11:33**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:31**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#859	**14-02-1721-8-A**	**02/25/14 11:34**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:34**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#860	**14-02-1721-9-A**	**02/25/14 11:35**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:40**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

#861	**14-02-1721-10-A**	**02/25/14 11:36**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:43**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#862	**14-02-1721-11-A**	**02/25/14 11:37**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:45**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#863	**14-02-1721-12-A**	**02/25/14 11:38**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:47**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#864	**14-02-1721-13-A**	**02/25/14 09:45**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:49**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0939	0.0847	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#865	**14-02-1721-21-A**	**02/25/14 14:37**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:52**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-54**	**N/A**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:16**	**140226L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
570-IV-P/S-O-001	**14-02-1721-1-A**	**02/25/14 09:00**	**Other**	**GC 31**	**02/25/14**	**02/26/14 23:13**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	100	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	120	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

570-IV-P/S-CS-001	**14-02-1721-2-A**	**02/25/14 09:05**	**Other**	**GC 31**	**02/25/14**	**02/26/14 23:32**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	52	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
570-IV-P/S-CS-002	**14-02-1721-3-A**	**02/25/14 09:15**	**Other**	**GC 31**	**02/25/14**	**02/26/14 23:51**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

DC-396	**14-02-1721-4-A**	**02/25/14 09:30**	**Other**	**GC 31**	**02/25/14**	**02/27/14 00:10**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	250	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#856	**14-02-1721-5-A**	**02/25/14 11:31**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 00:29**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

#857	**14-02-1721-6-A**	**02/25/14 11:32**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 00:49**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#858	**14-02-1721-7-A**	**02/25/14 11:33**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 01:08**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

#859	**14-02-1721-8-A**	**02/25/14 11:34**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 01:27**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#860	**14-02-1721-9-A**	**02/25/14 11:35**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 01:46**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

#861	**14-02-1721-10-A**	**02/25/14 11:36**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 02:05**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#862	**14-02-1721-11-A**	**02/25/14 11:37**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 02:24**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

#863	**14-02-1721-12-A**	**02/25/14 11:38**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 02:43**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#864	**14-02-1721-13-A**	**02/25/14 09:45**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 03:02**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

142-I-P/S-CS-005	**14-02-1721-14-A**	**02/25/14 13:10**	**Other**	**GC 31**	**02/25/14**	**02/27/14 03:21**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
142-I-P/S-CS-006	**14-02-1721-15-A**	**02/25/14 13:15**	**Other**	**GC 31**	**02/25/14**	**02/27/14 03:40**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

142-I-P/S-CS-007	**14-02-1721-16-A**	**02/25/14 13:20**	**Other**	**GC 31**	**02/25/14**	**02/27/14 03:59**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
142-I-P/S-CS-008	**14-02-1721-17-A**	**02/25/14 13:35**	**Other**	**GC 31**	**02/25/14**	**02/27/14 04:18**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

142-I-P/S-CS-009	**14-02-1721-18-A**	**02/25/14 13:40**	**Other**	**GC 31**	**02/25/14**	**02/27/14 04:38**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
142-I-P/S-CS-010	**14-02-1721-19-A**	**02/25/14 13:50**	**Other**	**GC 31**	**02/25/14**	**02/27/14 05:16**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

#865	**14-02-1721-21-A**	**02/25/14 14:37**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 05:35**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	73	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-204**	**N/A**	**Solid**	**GC 31**	**02/25/14**	**02/26/14 22:54**	**140225L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
571-IIIA-P/S-O-001	**14-02-1721-20-F**	**02/25/14 14:20**	**Aqueous**	**GC 31**	**02/25/14**	**02/27/14 07:29**	**140225L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	0.98	1.00	
Aroclor-1221	ND	0.98	1.00	
Aroclor-1232	ND	0.98	1.00	
Aroclor-1242	ND	0.98	1.00	
Aroclor-1248	ND	0.98	1.00	
Aroclor-1254	ND	0.98	1.00	
Aroclor-1260	ND	0.98	1.00	
Aroclor-1262	ND	0.98	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	50-135	
2,4,5,6-Tetrachloro-m-Xylene	86	50-135	

Method Blank	**099-12-533-894**	**N/A**	**Aqueous**	**GC 31**	**02/25/14**	**02/27/14 07:10**	**140225L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1.0	1.00	
Aroclor-1221	ND	1.0	1.00	
Aroclor-1232	ND	1.0	1.00	
Aroclor-1242	ND	1.0	1.00	
Aroclor-1248	ND	1.0	1.00	
Aroclor-1254	ND	1.0	1.00	
Aroclor-1260	ND	1.0	1.00	
Aroclor-1262	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	50-135	
2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
571-IIIA-P/S-O-001	**14-02-1721-20-A**	**02/25/14 14:20**	**Aqueous**	**GC/MS JJ**	**02/25/14**	**02/26/14 07:33**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/25/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1721
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L

Project: Former Pechiney Cast Plate Facility / 106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	34	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	80-120	
Dibromofluoromethane	104	78-126	
1,2-Dichloroethane-d4	105	75-135	
Toluene-d8	95	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-13299**	**N/A**	**Aqueous**	**GC/MS JJ**	**02/25/14**	**02/26/14 02:36**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/25/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1721
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: Former Pechiney Cast Plate Facility / 106270030		Page 4 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	80-120	
Dibromofluoromethane	107	78-126	
1,2-Dichloroethane-d4	113	75-135	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
570-IV-P/S-O-001	**14-02-1721-1-A**	**02/25/14 09:00**	**Other**	**GC/MS BB**	**02/25/14**	**02/26/14 04:34**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/25/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1721
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	53	63-141	2,6
1,2-Dichloroethane-d4	93	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#865	**14-02-1721-21-A**	**02/25/14 14:37**	**Solid**	**GC/MS BB**	**02/25/14**	**02/26/14 05:01**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	95	63-141	
1,2-Dichloroethane-d4	93	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8207**	**N/A**	**Solid**	**GC/MS BB**	**02/25/14**	**02/26/14 03:40**	**140225L03**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	02/25/14
121 Innovation Drive, Suite 200	Work Order:	14-02-1721
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030		Page 6 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	89	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
570-IV-P/S-O-001	**Sample**	**Other**	**GC 46**	**02/26/14**	**02/26/14 20:08**	**140226S07**
570-IV-P/S-O-001	**Matrix Spike**	**Other**	**GC 46**	**02/26/14**	**02/26/14 19:32**	**140226S07**
570-IV-P/S-O-001	**Matrix Spike Duplicate**	**Other**	**GC 46**	**02/26/14**	**02/26/14 19:50**	**140226S07**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	44.66	400.0	392.5	87	395.7	88	64-130	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#856	**Sample**	**Solid**	**ICP 7300**	**02/26/14**	**02/26/14 19:12**	**140226S02**
#856	**Matrix Spike**	**Solid**	**ICP 7300**	**02/26/14**	**02/26/14 19:13**	**140226S02**
#856	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**02/26/14**	**02/26/14 19:14**	**140226S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	4.690	19	4.941	20	50-115	5	0-20	3
Arsenic	4.763	25.00	28.71	96	30.76	104	75-125	7	0-20	
Barium	122.1	25.00	147.8	4X	150.3	4X	75-125	4X	0-20	Q
Beryllium	0.3313	25.00	25.42	100	26.47	105	75-125	4	0-20	
Cadmium	ND	25.00	24.30	97	25.34	101	75-125	4	0-20	
Chromium	14.02	25.00	38.05	96	39.60	102	75-125	4	0-20	
Cobalt	10.38	25.00	35.47	100	36.23	103	75-125	2	0-20	
Copper	11.74	25.00	37.53	103	38.92	109	75-125	4	0-20	
Lead	28.28	25.00	59.22	124	61.47	133	75-125	4	0-20	3
Molybdenum	ND	25.00	22.63	91	23.49	94	75-125	4	0-20	
Nickel	10.86	25.00	34.62	95	35.53	99	75-125	3	0-20	
Selenium	ND	25.00	21.19	85	22.10	88	75-125	4	0-20	
Silver	ND	12.50	13.15	105	13.69	110	75-125	4	0-20	
Thallium	ND	25.00	18.28	73	17.72	71	75-125	3	0-20	3
Vanadium	30.99	25.00	54.40	94	56.27	101	75-125	3	0-20	
Zinc	59.54	25.00	83.97	98	85.68	105	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
571-IIIA-P/S-O-001	**Sample**	**Aqueous**	**ICP 7300**	**02/26/14**	**02/26/14 21:06**	**140226SA5**
571-IIIA-P/S-O-001	**Matrix Spike**	**Aqueous**	**ICP 7300**	**02/26/14**	**02/26/14 21:07**	**140226SA5**
571-IIIA-P/S-O-001	**Matrix Spike Duplicate**	**Aqueous**	**ICP 7300**	**02/26/14**	**02/26/14 21:09**	**140226SA5**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	0.5000	0.2883	58	0.2556	51	72-132	12	0-10	3,4
Arsenic	ND	0.5000	0.5014	100	0.5385	108	80-140	7	0-11	
Barium	3.433	0.5000	4.069	4X	3.968	4X	87-123	4X	0-6	Q
Beryllium	ND	0.5000	0.5236	105	0.5548	111	89-119	6	0-8	
Cadmium	ND	0.5000	0.5111	102	0.5456	109	82-124	7	0-7	
Chromium	0.01579	0.5000	0.5137	100	0.5580	108	86-122	8	0-8	
Cobalt	ND	0.5000	0.5415	108	0.5800	116	83-125	7	0-7	
Copper	0.05980	0.5000	0.5778	104	0.6045	109	78-126	5	0-7	
Lead	0.03055	0.5000	0.5398	102	0.5743	109	84-120	6	0-7	
Molybdenum	0.01075	0.5000	0.4640	91	0.4992	98	78-126	7	0-7	
Nickel	0.01531	0.5000	0.5265	102	0.5661	110	84-120	7	0-7	
Selenium	ND	0.5000	0.4781	96	0.5136	103	79-127	7	0-9	
Silver	ND	0.2500	0.2675	107	0.2870	115	86-128	7	0-7	
Thallium	ND	0.5000	0.5014	100	0.5263	105	79-121	5	0-8	
Vanadium	0.04546	0.5000	0.5428	99	0.5847	108	88-118	7	0-7	
Zinc	2.334	0.5000	2.928	4X	2.848	4X	89-131	4X	0-8	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1660-1	**Sample**	**Aqueous**	**Mercury**	**02/26/14**	**02/26/14 16:35**	**140226S02**
14-02-1660-1	**Matrix Spike**	**Aqueous**	**Mercury**	**02/26/14**	**02/26/14 16:37**	**140226S02**
14-02-1660-1	**Matrix Spike Duplicate**	**Aqueous**	**Mercury**	**02/26/14**	**02/26/14 16:39**	**140226S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.01000	0.009311	93	0.008315	83	75-120	11	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#856	**Sample**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:23**	**140226S01**
#856	**Matrix Spike**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:25**	**140226S01**
#856	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:27**	**140226S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7394	89	0.7402	89	71-137	0	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#859	**Sample**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 01:27**	**140225S14**
#859	**Matrix Spike**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 05:54**	**140225S14**
#859	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**02/25/14**	**02/27/14 06:13**	**140225S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	92.76	93	96.74	97	50-135	4	0-25	
Aroclor-1260	ND	100.0	85.48	85	87.31	87	50-135	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1666-1	**Sample**	**Aqueous**	**GC/MS JJ**	**02/25/14**	**02/26/14 03:06**	**140225S03**
14-02-1666-1	**Matrix Spike**	**Aqueous**	**GC/MS JJ**	**02/25/14**	**02/26/14 03:36**	**140225S03**
14-02-1666-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS JJ**	**02/25/14**	**02/26/14 04:05**	**140225S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	51.70	103	50.80	102	74-122	2	0-21	
Carbon Tetrachloride	ND	50.00	55.84	112	54.35	109	60-144	3	0-21	
Chlorobenzene	ND	50.00	52.69	105	52.11	104	73-120	1	0-22	
1,2-Dibromoethane	ND	50.00	53.77	108	54.10	108	80-122	1	0-20	
1,2-Dichlorobenzene	ND	50.00	51.11	102	54.20	108	70-120	6	0-26	
1,2-Dichloroethane	ND	50.00	53.47	107	51.34	103	64-142	4	0-20	
1,1-Dichloroethene	ND	50.00	51.81	104	51.64	103	52-136	0	0-21	
Ethylbenzene	ND	50.00	52.47	105	52.14	104	77-125	1	0-24	
Toluene	ND	50.00	51.96	104	51.56	103	72-126	1	0-23	
Trichloroethene	ND	50.00	50.73	101	50.58	101	74-128	0	0-22	
Vinyl Chloride	ND	50.00	46.70	93	47.55	95	67-133	2	0-20	
p/m-Xylene	ND	100.0	111.7	112	109.5	109	63-129	2	0-25	
o-Xylene	ND	50.00	57.80	116	58.07	116	62-128	0	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	52.64	105	53.07	106	68-134	1	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
570-IV-P/S-O-001	**Sample**	**Other**	**GC/MS BB**	**02/25/14**	**02/26/14 04:34**	**140225S02**
570-IV-P/S-O-001	**Matrix Spike**	**Other**	**GC/MS BB**	**02/25/14**	**02/26/14 05:28**	**140225S02**
570-IV-P/S-O-001	**Matrix Spike Duplicate**	**Other**	**GC/MS BB**	**02/25/14**	**02/26/14 05:56**	**140225S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	38.21	76	40.67	81	61-127	6	0-20	
Carbon Tetrachloride	ND	50.00	25.41	51	30.34	61	51-135	18	0-29	
Chlorobenzene	ND	50.00	37.63	75	40.74	81	57-123	8	0-20	
1,2-Dibromoethane	ND	50.00	39.57	79	40.88	82	64-124	3	0-20	
1,2-Dichlorobenzene	ND	50.00	32.09	64	35.17	70	35-131	9	0-25	
1,2-Dichloroethane	ND	50.00	38.22	76	39.49	79	80-120	3	0-20	3
1,1-Dichloroethene	ND	50.00	48.42	97	51.91	104	47-143	7	0-25	
Ethylbenzene	ND	50.00	35.70	71	39.17	78	57-129	9	0-22	
Toluene	ND	50.00	38.08	76	41.05	82	63-123	8	0-20	
Trichloroethene	ND	50.00	61.22	122	66.85	134	44-158	9	0-20	
Vinyl Chloride	ND	50.00	44.85	90	50.48	101	49-139	12	0-47	
p/m-Xylene	ND	100.0	70.29	70	77.07	77	70-130	9	0-30	
o-Xylene	ND	50.00	36.49	73	39.82	80	70-130	9	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	42.32	85	42.59	85	57-123	1	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-793	**LCS**	**Solid**	**GC 46**	**02/26/14**	**02/26/14 19:15**	**140226B07**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	301.1	75	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-498-146	**LCS**	**Aqueous**	**GC 45**	**02/26/14**	**02/26/14 13:16**	**140226B06**
099-15-498-146	**LCSD**	**Aqueous**	**GC 45**	**02/26/14**	**02/26/14 13:35**	**140226B06**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	4000	3976	99	4325	108	75-117	8	0-13	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18074	**LCS**	**Solid**	**ICP 7300**	**02/26/14**	**02/26/14 19:11**	**140226L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.28	97	80-120	73-127	
Arsenic	25.00	25.16	101	80-120	73-127	
Barium	25.00	26.65	107	80-120	73-127	
Beryllium	25.00	25.63	103	80-120	73-127	
Cadmium	25.00	26.60	106	80-120	73-127	
Chromium	25.00	26.66	107	80-120	73-127	
Cobalt	25.00	28.64	115	80-120	73-127	
Copper	25.00	26.42	106	80-120	73-127	
Lead	25.00	26.85	107	80-120	73-127	
Molybdenum	25.00	25.66	103	80-120	73-127	
Nickel	25.00	28.06	112	80-120	73-127	
Selenium	25.00	24.16	97	80-120	73-127	
Silver	12.50	13.97	112	80-120	73-127	
Thallium	25.00	27.18	109	80-120	73-127	
Vanadium	25.00	25.80	103	80-120	73-127	
Zinc	25.00	26.18	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-003-14052	**LCS**	**Aqueous**	**ICP 7300**	**02/26/14**	**02/26/14 21:04**	**140226LA5**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	0.5000	0.5159	103	80-120	73-127	
Arsenic	0.5000	0.5165	103	80-120	73-127	
Barium	0.5000	0.5271	105	80-120	73-127	
Beryllium	0.5000	0.5066	101	80-120	73-127	
Cadmium	0.5000	0.5350	107	80-120	73-127	
Chromium	0.5000	0.5246	105	80-120	73-127	
Cobalt	0.5000	0.5782	116	80-120	73-127	
Copper	0.5000	0.5242	105	80-120	73-127	
Lead	0.5000	0.5516	110	80-120	73-127	
Molybdenum	0.5000	0.5232	105	80-120	73-127	
Nickel	0.5000	0.5570	111	80-120	73-127	
Selenium	0.5000	0.4969	99	80-120	73-127	
Silver	0.2500	0.2736	109	80-120	73-127	
Thallium	0.5000	0.5530	111	80-120	73-127	
Vanadium	0.5000	0.5098	102	80-120	73-127	
Zinc	0.5000	0.5194	104	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-04-008-6853	**LCS**	**Aqueous**	**Mercury**	**02/26/14**	**02/26/14 16:33**	**140226L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.01000	0.009962	100	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-54	**LCS**	**Solid**	**Mercury**	**02/26/14**	**02/26/14 11:18**	**140226L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8016	96	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-204	**LCS**	**Solid**	**GC 31**	**02/25/14**	**02/26/14 22:35**	**140225L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	96.22	96	50-135	
Aroclor-1260	100.0	90.81	91	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-533-894	**LCS**	**Aqueous**	**GC 31**	**02/25/14**	**02/27/14 06:32**	**140225L13**
099-12-533-894	**LCSD**	**Aqueous**	**GC 31**	**02/25/14**	**02/27/14 06:51**	**140225L13**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	1.762	88	1.467	73	50-135	18	0-25	
Aroclor-1260	2.000	1.723	86	1.546	77	50-135	11	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-001-13299	**LCS**	**Aqueous**	**GC/MS JJ**	**02/25/14**	**02/26/14 01:07**	**140225L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	52.57	105	80-120	73-127	
Carbon Tetrachloride	50.00	56.35	113	67-139	55-151	
Chlorobenzene	50.00	53.31	107	78-120	71-127	
1,2-Dibromoethane	50.00	53.47	107	80-120	73-127	
1,2-Dichlorobenzene	50.00	54.44	109	63-129	52-140	
1,2-Dichloroethane	50.00	52.40	105	70-130	60-140	
1,1-Dichloroethene	50.00	53.42	107	66-126	56-136	
Ethylbenzene	50.00	53.26	107	80-123	73-130	
Toluene	50.00	53.50	107	80-120	73-127	
Trichloroethene	50.00	53.69	107	80-122	73-129	
Vinyl Chloride	50.00	48.99	98	70-130	60-140	
p/m-Xylene	100.0	113.6	114	75-123	67-131	
o-Xylene	50.00	59.67	119	74-122	66-130	
Methyl-t-Butyl Ether (MTBE)	50.00	53.27	107	69-129	59-139	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/25/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1721
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8207	**LCS**	**Solid**	**GC/MS BB**	**02/25/14**	**02/26/14 02:46**	**140225L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	46.08	92	78-120	71-127	
Carbon Tetrachloride	50.00	44.74	89	49-139	34-154	
Chlorobenzene	50.00	50.23	100	79-120	72-127	
1,2-Dibromoethane	50.00	49.23	98	80-120	73-127	
1,2-Dichlorobenzene	50.00	50.39	101	75-120	68-128	
1,2-Dichloroethane	50.00	46.49	93	80-120	73-127	
1,1-Dichloroethene	50.00	51.30	103	74-122	66-130	
Ethylbenzene	50.00	48.49	97	76-120	69-127	
Toluene	50.00	48.10	96	77-120	70-127	
Trichloroethene	50.00	50.47	101	80-120	73-127	
Vinyl Chloride	50.00	55.38	111	68-122	59-131	
p/m-Xylene	100.0	96.81	97	75-125	67-133	
o-Xylene	50.00	50.18	100	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	49.84	100	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-02-1721

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3010A Total	598	ICP 7300	1
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7470A	EPA 7470A Total	769	Mercury	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3510C	682	GC 45	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3510C	669	GC 31	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	823	GC/MS BB	2
EPA 8260B	EPA 5030C	876	GC/MS JJ	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-02-1721

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25729

PROJECT NAME: PECHINEY

DATE: 2/25/14 PAGE 1 OF 2

PROJECT NUMBER: 106270030

RESULTS TO: LINDA CONLAN

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: COURIER

LABORATORY NAME: CAL SCIENCE

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC IRVINE

REPORTING REQUIREMENTS:

14-02-1721

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	8260 VOCs	6010/7470 Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2/25/14	0900	570-IV-P/S-0-001	X	X	X	X	4oz JAR	O			X		1	
2		0905	570-IV-P/S-CS-001	X					O			X		1	
3		0915	570-IV-P/S-CS-002	X					O			X		1	
4		0930	OC-396	X					O			X		1	
5		1131	#856	X			X		S			X		1	
6		1132	#857	X			X		S			X		1	
7		1133	#858	X			X		S			X		1	
8		1134	#859	X			X		S			X		1	
9		1135	#860	X			X		S			X		1	
10		1136	#861	X			X		S			X		1	
11		1137	#862	X			X		S			X		1	
12		1138	#863	X			X		S			X		1	
13		0945	#864	X			X		S			X		1	
14		1310	142-I-P/S-CS-005	X					O			X		1	
15	2/25/14	1315	142-I-P/S-CS-006	X				4oz JAR	O			X		1	

TOTAL NUMBER OF CONTAINERS: 15

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	2/25/14	1520	SIGNATURE:	2/25/14	1520
PRINTED NAME: KEN CURNUTT			PRINTED NAME: ARTHUR YOUNG		
COMPANY: AMEC			COMPANY: CASCIENCE		
SIGNATURE:	2/25/14	1653	SIGNATURE:	2/25/14	1653
PRINTED NAME: ARTHUR YOUNG			PRINTED NAME: J. PATEL		
COMPANY: CASCIENCE			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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CHAIN-OF-CUSTODY RECORD

NB25731

PROJECT NAME: PECHINEY		DATE: 2/25/14	PAGE 2 OF 2
PROJECT NUMBER: 106270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		1721
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Ken Curnutt

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	8260 VOCs	Total 22 metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	2/25/14	1320	142-I-P/S-CS-007	X				4oz JAR	O			X		1	
17	↑	1335	142-I-P/S-CS-008	X				↕	O			X		1	
18		1340	142-I-P/S-CS-009	X					O			X		1	
19	↓	1350	142-I-P/S-CS-010	X				4oz JAR	O			X		1	
20	2/25/14	1420	571-IIIA-P/S-0-001	X	X	X	X	MULTIPLE	W			X		6	
21	2/25/14	1437	#865	X	X	X	X	4oz Jar	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	2/25/14	1530	SIGNATURE:	2/25/14	1530
PRINTED NAME: Ken Curnutt			PRINTED NAME: Arthur Young		
COMPANY: AMEC			COMPANY: Calscience		
SIGNATURE:	2/25/14	1653	SIGNATURE:	2/25/14	1653
PRINTED NAME: Arthur Young			PRINTED NAME: J. PATEL		
COMPANY:			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: ~~10~~ 11

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02-1721

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 02/25/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.8 °C - 0.3 °C (CF) = 1.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 806

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☑VOA**h** (3) ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☑500PB**n**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 806

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 681

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 681

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-02-1932

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/03/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-02-1932

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-02-1932 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 02/27/14. They were assigned to Work Order 14-02-1932.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-02-1932
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	02/27/14 16:10
		Number of Containers:	14
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
582-IV-P/S-CS-001	14-02-1932-1	02/27/14 13:21	1	Other
582-IV-P/S-CS-002	14-02-1932-2	02/27/14 13:26	1	Other
582-IV-P/S-CS-003	14-02-1932-3	02/27/14 13:32	1	Other
548-I-P/S-SS-014	14-02-1932-4	02/27/14 14:08	1	Solid
548-I-P/S-SS-015	14-02-1932-5	02/27/14 14:09	1	Solid
548-I-P/S-SS-016	14-02-1932-6	02/27/14 14:10	1	Solid
548-I-P/S-SS-017	14-02-1932-7	02/27/14 14:11	1	Solid
548-I-P/S-SS-018	14-02-1932-8	02/27/14 14:13	1	Solid
548-I-P/S-SS-019	14-02-1932-9	02/27/14 14:14	1	Solid
548-I-P/S-SS-020	14-02-1932-10	02/27/14 14:16	1	Solid
548-I-P/S-SS-021	14-02-1932-11	02/27/14 14:17	1	Solid
548-I-P/S-SS-022	14-02-1932-12	02/27/14 14:20	1	Solid
548-I-P/S-SS-023	14-02-1932-13	02/27/14 14:21	1	Solid
#866	14-02-1932-14	02/26/14 14:30	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-02-1932
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	02/27/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
548-I-P/S-SS-014 (14-02-1932-4)						
Aroclor-1248	9400		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	600		50	ug/kg	EPA 8082	EPA 3540C
548-I-P/S-SS-015 (14-02-1932-5)						
Aroclor-1248	660		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	71		50	ug/kg	EPA 8082	EPA 3540C
548-I-P/S-SS-016 (14-02-1932-6)						
Aroclor-1248	5600		490	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	370		49	ug/kg	EPA 8082	EPA 3540C
548-I-P/S-SS-018 (14-02-1932-8)						
Aroclor-1248	9600		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	740		50	ug/kg	EPA 8082	EPA 3540C
548-I-P/S-SS-020 (14-02-1932-10)						
Aroclor-1248	670		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	73		50	ug/kg	EPA 8082	EPA 3540C
548-I-P/S-SS-021 (14-02-1932-11)						
Aroclor-1248	220		50	ug/kg	EPA 8082	EPA 3540C
548-I-P/S-SS-022 (14-02-1932-12)						
Aroclor-1248	1800		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	190		50	ug/kg	EPA 8082	EPA 3540C
#866 (14-02-1932-14)						
C21-C22	1400		500	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	3200		500	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	7800		500	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	26000		500	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	18000		500	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	9700		500	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	4300		500	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	70000		500	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	120		50	ug/kg	EPA 8082	EPA 3540C
2-Hexanone	61		51	ug/kg	EPA 8260B	EPA 5030C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#866	**14-02-1932-14-A**	**02/26/14 14:30**	**Solid**	**GC 48**	**02/28/14**	**03/03/14 11:32**	**140228B03A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	500	101	
C7	ND	500	101	
C8	ND	500	101	
C9-C10	ND	500	101	
C11-C12	ND	500	101	
C13-C14	ND	500	101	
C15-C16	ND	500	101	
C17-C18	ND	500	101	
C19-C20	ND	500	101	
C21-C22	1400	500	101	
C23-C24	3200	500	101	
C25-C28	7800	500	101	
C29-C32	26000	500	101	
C33-C36	18000	500	101	
C37-C40	9700	500	101	
C41-C44	4300	500	101	
C6-C44 Total	70000	500	101	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	132	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-799**	**N/A**	**Solid**	**GC 46**	**02/28/14**	**02/28/14 13:34**	**140228B03A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
582-IV-P/S-CS-001	**14-02-1932-1-A**	**02/27/14 13:21**	**Other**	**GC 31**	**02/27/14**	**03/01/14 02:43**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	ND	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

582-IV-P/S-CS-002	**14-02-1932-2-A**	**02/27/14 13:26**	**Other**	**GC 31**	**02/27/14**	**03/01/14 03:02**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
582-IV-P/S-CS-003	**14-02-1932-3-A**	**02/27/14 13:32**	**Other**	**GC 31**	**02/27/14**	**03/01/14 03:21**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

548-I-P/S-SS-014	**14-02-1932-4-A**	**02/27/14 14:08**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 03:40**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	600	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-014	**14-02-1932-4-A**	**02/27/14 14:08**	**Solid**	**GC 31**	**02/27/14**	**03/03/14 14:15**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	9400	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-015	**14-02-1932-5-A**	**02/27/14 14:09**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 03:59**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	660	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	71	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-016	**14-02-1932-6-A**	**02/27/14 14:10**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 04:18**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	370	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

548-I-P/S-SS-016	**14-02-1932-6-A**	**02/27/14 14:10**	**Solid**	**GC 31**	**02/27/14**	**03/03/14 14:34**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	5600	490	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-017	**14-02-1932-7-A**	**02/27/14 14:11**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 04:37**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

548-I-P/S-SS-018	**14-02-1932-8-A**	**02/27/14 14:13**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 04:56**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	740	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-018	**14-02-1932-8-A**	**02/27/14 14:13**	**Solid**	**GC 31**	**02/27/14**	**03/03/14 14:53**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	9600	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-019	**14-02-1932-9-A**	**02/27/14 14:14**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 05:15**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-020	**14-02-1932-10-A**	**02/27/14 14:16**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 05:34**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	670	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	73	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

548-I-P/S-SS-021	**14-02-1932-11-A**	**02/27/14 14:17**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 05:54**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	220	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-022	**14-02-1932-12-A**	**02/27/14 14:20**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 06:13**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	190	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

548-I-P/S-SS-022	**14-02-1932-12-A**	**02/27/14 14:20**	**Solid**	**GC 31**	**02/27/14**	**03/03/14 15:12**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1800	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-023	**14-02-1932-13-A**	**02/27/14 14:21**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 06:32**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

#866	**14-02-1932-14-A**	**02/26/14 14:30**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 06:51**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	120	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	29	60-125	2,6
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-205**	**N/A**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 01:45**	**140227L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#866	**14-02-1932-14-A**	**02/26/14 14:30**	**Solid**	**GC/MS BB**	**02/27/14**	**02/27/14 18:46**	**140227L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	61	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	60-132	
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	94	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8214**	**N/A**	**Solid**	**GC/MS BB**	**02/27/14**	**02/27/14 15:18**	**140227L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	92	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1966-23	**Sample**	**Solid**	**GC 46**	**02/28/14**	**02/28/14 15:55**	**140228S03**
14-02-1966-23	**Matrix Spike**	**Solid**	**GC 46**	**02/28/14**	**02/28/14 14:27**	**140228S03**
14-02-1966-23	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**02/28/14**	**02/28/14 14:44**	**140228S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	317.8	79	311.7	78	64-130	2	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
548-I-P/S-SS-015	**Sample**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 03:59**	**140227S13**
548-I-P/S-SS-015	**Matrix Spike**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 02:05**	**140227S13**
548-I-P/S-SS-015	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 02:24**	**140227S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	843.6	844	633.2	633	50-135	28	0-25	3,4
Aroclor-1260	70.55	100.0	314.4	244	245.2	175	50-135	25	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-1762-4	**Sample**	**Solid**	**GC/MS BB**	**02/26/14**	**02/27/14 16:44**	**140227S01**
14-02-1762-4	**Matrix Spike**	**Solid**	**GC/MS BB**	**02/26/14**	**02/27/14 17:11**	**140227S01**
14-02-1762-4	**Matrix Spike Duplicate**	**Solid**	**GC/MS BB**	**02/26/14**	**02/27/14 17:38**	**140227S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	5000	4692	94	4659	93	61-127	1	0-20	
Chloroform	ND	5000	4755	95	4669	93	80-120	2	0-20	
1,1-Dichloroethane	ND	5000	4649	93	4394	88	80-120	6	0-20	
1,2-Dichloroethane	ND	5000	4667	93	4616	92	80-120	1	0-20	
1,1-Dichloroethene	ND	5000	5045	101	5060	101	47-143	0	0-25	
Tetrachloroethene	ND	5000	5728	115	5829	117	80-120	2	0-20	
Toluene	ND	5000	4884	98	4854	97	63-123	1	0-20	
Trichloroethene	ND	5000	4954	99	4923	98	44-158	1	0-20	
p/m-Xylene	ND	10000	10100	101	10020	100	70-130	1	0-30	
o-Xylene	ND	5000	5158	103	5163	103	70-130	0	0-30	
Methyl-t-Butyl Ether (MTBE)	15470	5000	19140	73	19960	90	57-123	4	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-799	**LCS**	**Solid**	**GC 46**	**02/28/14**	**02/28/14 13:52**	**140228B03A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	357.6	89	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-205	**LCS**	**Solid**	**GC 31**	**02/27/14**	**03/01/14 01:26**	**140227L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	98.80	99	50-135	
Aroclor-1260	100.0	103.6	104	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	02/27/14
121 Innovation Drive, Suite 200		Work Order:	14-02-1932
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8214	**LCS**	**Solid**	**GC/MS BB**	**02/27/14**	**02/27/14 14:17**	**140227L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	45.62	91	78-120	71-127	
Carbon Tetrachloride	50.00	46.35	93	49-139	34-154	
Chlorobenzene	50.00	51.11	102	79-120	72-127	
1,2-Dibromoethane	50.00	49.84	100	80-120	73-127	
1,2-Dichlorobenzene	50.00	52.49	105	75-120	68-128	
1,2-Dichloroethane	50.00	45.23	90	80-120	73-127	
1,1-Dichloroethene	50.00	50.51	101	74-122	66-130	
Ethylbenzene	50.00	49.48	99	76-120	69-127	
Toluene	50.00	47.16	94	77-120	70-127	
Trichloroethene	50.00	48.97	98	80-120	73-127	
Vinyl Chloride	50.00	54.94	110	68-122	59-131	
p/m-Xylene	100.0	98.09	98	75-125	67-133	
o-Xylene	50.00	50.71	101	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	48.58	97	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-02-1932

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	823	GC/MS BB	2

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Glossary of Terms and Qualifiers

Work Order: 14-02-1932

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25736

PROJECT NAME: PECHINEY		DATE: 2/27/14	PAGE / OF /
PROJECT NUMBER: 106270030	LABORATORY NAME: CALSCIENCE	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:	IRVINE	14-02-1932
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT: SUE NOWAK		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEV CURNOTT, Kimberly Chomiszky, Stephen Hwang

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	8260 VOCs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	2/27/14	1321	582-IV-P/S-CS-001	X			4oz JAR	O			X		1	
2		1326	582-IV-P/S-CS-002	X				O			X		1	
3		1332	582-IV-P/S-CS-003	X				O			X		1	
4		1408	548-I-P/S-SS-014	X				S			X		1	
5		1409	548-I-P/S-SS-015	X				S			X		1	
6		1410	548-I-P/S-SS-016	X				S			X		1	
7		1411	548-I-P/S-SS-017	X				S			X		1	
8		1413	548-I-P/S-SS-018	X				S			X		1	
9		1414	548-I-P/S-SS-019	X				S			X		1	
10		1416	548-I-P/S-SS-020	X				S			X		1	
11		1417	548-I-P/S-SS-021	X				S			X		1	
12		1420	548-I-P/S-SS-022	X				S			X		1	
13		1421	548-I-P/S-SS-023	X				S			X		1	
14	2/26/14	1430	#866	X	X	X		S			X		1	Xshe.

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Kev Curnott COMPANY: AMEC	2/27/14	1430	SIGNATURE: [signature] PRINTED NAME: STEPHEN Hwang COMPANY: AMEC	2/27/14	1430
SIGNATURE: [signature] PRINTED NAME: STEPHEN Hwang COMPANY: AMEC	2/27/14	1505	SIGNATURE: [signature] PRINTED NAME: ARTHUR YOUNG COMPANY: CALSCIENCE	2/27/14	1430
SIGNATURE: [signature] PRINTED NAME: ARTHUR YOUNG COMPANY: CALSCIENCE	2/27/14	1610	SIGNATURE: [signature] PRINTED NAME: J. PATEL COMPANY:	2/27/14	1610

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-02-1 9 3 2

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 02/27/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.9 °C - 0.3 °C (CF) = 1.6 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 778

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 778

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-0233

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/07/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-03-0233

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-0233 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/04/14. They were assigned to Work Order 14-03-0233.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0233
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		PO Number:	
		Date/Time Received:	03/04/14 17:43
		Number of Containers:	8
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
591-IV-P/S-CS-001	14-03-0233-1	03/04/14 08:13	1	Other
591-IV-P/S-CS-002	14-03-0233-2	03/04/14 08:18	1	Other
591-IV-P/S-CS-003	14-03-0233-3	03/04/14 08:25	1	Other
587-IV-P/S-CS-001	14-03-0233-4	03/04/14 09:40	1	Other
#867	14-03-0233-5	03/04/14 12:55	1	Solid
#868	14-03-0233-6	03/04/14 12:58	1	Solid
#869	14-03-0233-7	03/04/14 12:55	1	Solid
#870	14-03-0233-8	03/04/14 12:56	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0233
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	03/04/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
591-IV-P/S-CS-003 (14-03-0233-3)						
Aroclor-1268	120		50	ug/kg	EPA 8082	EPA 3540C
587-IV-P/S-CS-001 (14-03-0233-4)						
Aroclor-1248	180		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	76		50	ug/kg	EPA 8082	EPA 3540C
#868 (14-03-0233-6)						
C19-C20	63		50	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	99		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	220		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	460		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	860		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	880		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	650		50	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	370		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	3600		50	mg/kg	EPA 8015B (M)	EPA 3550B

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#867	**14-03-0233-5-A**	**03/04/14 12:55**	**Solid**	**GC 48**	**03/05/14**	**03/05/14 19:10**	**140305B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	72	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#868	**14-03-0233-6-A**	**03/04/14 12:58**	**Solid**	**GC 48**	**03/05/14**	**03/06/14 09:51**	**140305B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.1	
C7	ND	50	10.1	
C8	ND	50	10.1	
C9-C10	ND	50	10.1	
C11-C12	ND	50	10.1	
C13-C14	ND	50	10.1	
C15-C16	ND	50	10.1	
C17-C18	ND	50	10.1	
C19-C20	63	50	10.1	
C21-C22	99	50	10.1	
C23-C24	220	50	10.1	
C25-C28	460	50	10.1	
C29-C32	860	50	10.1	
C33-C36	880	50	10.1	
C37-C40	650	50	10.1	
C41-C44	370	50	10.1	
C6-C44 Total	3600	50	10.1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#869	**14-03-0233-7-A**	**03/04/14 12:55**	**Solid**	**GC 48**	**03/05/14**	**03/06/14 09:36**	**140305B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	88	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#870	**14-03-0233-8-A**	**03/04/14 12:56**	**Solid**	**GC 48**	**03/05/14**	**03/05/14 19:57**	**140305B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	76	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-805**	**N/A**	**Solid**	**GC 48**	**03/05/14**	**03/05/14 17:36**	**140305B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
591-IV-P/S-CS-001	**14-03-0233-1-A**	**03/04/14 08:13**	**Other**	**GC 31**	**03/04/14**	**03/06/14 15:04**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

591-IV-P/S-CS-002	**14-03-0233-2-A**	**03/04/14 08:18**	**Other**	**GC 31**	**03/04/14**	**03/06/14 15:23**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
591-IV-P/S-CS-003	**14-03-0233-3-A**	**03/04/14 08:25**	**Other**	**GC 31**	**03/04/14**	**03/06/14 15:42**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	120	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

587-IV-P/S-CS-001	**14-03-0233-4-A**	**03/04/14 09:40**	**Other**	**GC 31**	**03/04/14**	**03/06/14 16:01**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	180	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	76	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#867	**14-03-0233-5-A**	**03/04/14 12:55**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 03:01**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

#868	**14-03-0233-6-A**	**03/04/14 12:58**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 16:39**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#869	**14-03-0233-7-A**	**03/04/14 12:55**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 03:39**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

#870	**14-03-0233-8-A**	**03/04/14 12:56**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 03:58**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-206**	**N/A**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 00:48**	**140304L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0180-5	**Sample**	**Solid**	**GC 48**	**03/05/14**	**03/05/14 18:54**	**140305S01**
14-03-0180-5	**Matrix Spike**	**Solid**	**GC 48**	**03/05/14**	**03/05/14 18:07**	**140305S01**
14-03-0180-5	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**03/05/14**	**03/05/14 18:23**	**140305S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	370.9	93	351.8	88	80-120	5	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#869	**Sample**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 03:39**	**140304S21**
#869	**Matrix Spike**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 01:07**	**140304S21**
#869	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 01:26**	**140304S21**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	109.1	109	98.94	99	50-135	10	0-25	
Aroclor-1260	ND	100.0	95.00	95	101.8	102	50-135	7	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-805	**LCS**	**Solid**	**GC 48**	**03/05/14**	**03/05/14 17:52**	**140305B01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	350.7	88	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/04/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0233
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-206	**LCS**	**Solid**	**GC 31**	**03/04/14**	**03/06/14 00:28**	**140304L21**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	83.17	83	50-135	
Aroclor-1260	100.0	77.72	78	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-0233

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-0233

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25761

PROJECT NAME: Former Pelhamey Cast Plate Facility		DATE: 3/4/14	PAGE 1 OF 1
PROJECT NUMBER: 01062-70030	LABORATORY NAME: Caelsence	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		14-03-0233
TURNAROUND TIME: 48-hr			
SAMPLE SHIPMENT METHOD: Las Courier	LABORATORY CONTACT: Steve Novak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Stephen Hwang

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8032 AB	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/4/14	0813	591-IV-P/S-CS-001	X		4oz glass jar	O			X		1	
2		0818	591-IV-P/S-CS-002	X			O			X		1	
3		0825	591-IV-P/S-CS-003	X			O			X		1	
4		0940	587-IV-P/S-CS-001	X			O			X		1	
5		1255	#867	X	X		S			X		1	
6		1258	#868	X	X		S			X		1	
7		1255	#869	X	X		S			X		1	
8		1256	#870	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Stephen Hwang COMPANY: AMEC	3/4/14	1533	SIGNATURE: [signature] PRINTED NAME: Adam Peterson COMPANY: CEL	3/4/14	1533
SIGNATURE: [signature] PRINTED NAME: Adam Peterson COMPANY: CEL	3/4/14	1743	SIGNATURE: [signature] PRINTED NAME: Noel Cruise COMPANY: CEL	3/4/14	1743
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 8

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-0233

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/04/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.6 °C - 0.3 °C (CF) = 2.3 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna$_2$ ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna$_2$ ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ Labeled/Checked by: 802

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 802

Preservative: h: HCL n: HNO_3 na$_2$:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered Scanned by: 802

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-0325

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/07/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-03-0325

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-0325 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/05/14. They were assigned to Work Order 14-03-0325.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0325
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	03/05/14 17:51
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
594-IV-P/S-CS-001	14-03-0325-1	03/05/14 07:45	1	Other
594-IV-P/S-CS-002	14-03-0325-2	03/05/14 07:50	1	Other
594-IV-P/S-CS-003	14-03-0325-3	03/05/14 07:56	1	Other
596-IV-P/S-CS-001	14-03-0325-4	03/05/14 08:07	1	Other
596-IV-P/S-CS-002	14-03-0325-5	03/05/14 08:16	1	Other
596-IV-P/S-CS-003	14-03-0325-6	03/05/14 08:21	1	Other
#871	14-03-0325-7	03/05/14 09:55	1	Solid
#872	14-03-0325-8	03/05/14 09:56	1	Solid
#873	14-03-0325-9	03/05/14 09:57	1	Solid
#874	14-03-0325-10	03/05/14 09:58	1	Solid
#829-9	14-03-0325-11	03/05/14 10:08	1	Solid
#827-9	14-03-0325-12	03/05/14 10:10	1	Solid
#828-9	14-03-0325-13	03/05/14 10:12	1	Solid
#875	14-03-0325-14	03/05/14 10:23	1	Solid
#876	14-03-0325-15	03/05/14 10:24	1	Solid
#877	14-03-0325-16	03/05/14 10:25	1	Solid
#878	14-03-0325-17	03/05/14 10:27	1	Solid
580-IV-F/F-SS-001	14-03-0325-18	03/05/14 12:59	1	Solid
580-IV-F/F-SS-002	14-03-0325-19	03/05/14 13:01	1	Solid
580-IV-F/F-SS-003	14-03-0325-20	03/05/14 13:05	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0325
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	03/05/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
580-IV-F/F-SS-001 (14-03-0325-18)						
C21-C22	320		240	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	4600		240	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	13000		240	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	13000		240	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	2500		240	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	1600		240	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	35000		240	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	86		50	ug/kg	EPA 8082	EPA 3540C
580-IV-F/F-SS-002 (14-03-0325-19)						
C23-C24	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	53		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	110		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	140		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	8.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	330		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
580-IV-F/F-SS-003 (14-03-0325-20)						
C25-C28	6100		500	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	8500		500	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	8500		500	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	3600		500	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	1500		500	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	28000		500	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	160		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
580-IV-F/F-SS-001	**14-03-0325-18-A**	**03/05/14 12:59**	**Solid**	**GC 47**	**03/06/14**	**03/07/14 09:37**	**140306B12A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	240	49.0	
C7	ND	240	49.0	
C8	ND	240	49.0	
C9-C10	ND	240	49.0	
C11-C12	ND	240	49.0	
C13-C14	ND	240	49.0	
C15-C16	ND	240	49.0	
C17-C18	ND	240	49.0	
C19-C20	ND	240	49.0	
C21-C22	320	240	49.0	
C23-C24	ND	240	49.0	
C25-C28	4600	240	49.0	
C29-C32	13000	240	49.0	
C33-C36	13000	240	49.0	
C37-C40	2500	240	49.0	
C41-C44	1600	240	49.0	
C6-C44 Total	35000	240	49.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	119	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
580-IV-F/F-SS-002	**14-03-0325-19-A**	**03/05/14 13:01**	**Solid**	**GC 47**	**03/06/14**	**03/06/14 21:23**	**140306B12A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	24	5.0	1.00	
C25-C28	53	5.0	1.00	
C29-C32	110	5.0	1.00	
C33-C36	140	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	8.4	5.0	1.00	
C6-C44 Total	330	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	79	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
580-IV-F/F-SS-003	**14-03-0325-20-A**	**03/05/14 13:05**	**Solid**	**GC 47**	**03/06/14**	**03/07/14 09:53**	**140306B12A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	500	99.0	
C7	ND	500	99.0	
C8	ND	500	99.0	
C9-C10	ND	500	99.0	
C11-C12	ND	500	99.0	
C13-C14	ND	500	99.0	
C15-C16	ND	500	99.0	
C17-C18	ND	500	99.0	
C19-C20	ND	500	99.0	
C21-C22	ND	500	99.0	
C23-C24	ND	500	99.0	
C25-C28	6100	500	99.0	
C29-C32	8500	500	99.0	
C33-C36	8500	500	99.0	
C37-C40	3600	500	99.0	
C41-C44	1500	500	99.0	
C6-C44 Total	28000	500	99.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-807**	**N/A**	**Solid**	**GC 47**	**03/06/14**	**03/06/14 19:41**	**140306B12A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	79	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
594-IV-P/S-CS-001	**14-03-0325-1-A**	**03/05/14 07:45**	**Other**	**GC 31**	**03/06/14**	**03/06/14 23:20**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

594-IV-P/S-CS-002	**14-03-0325-2-A**	**03/05/14 07:50**	**Other**	**GC 31**	**03/06/14**	**03/06/14 23:39**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
594-IV-P/S-CS-003	**14-03-0325-3-A**	**03/05/14 07:56**	**Other**	**GC 31**	**03/06/14**	**03/06/14 23:58**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

596-IV-P/S-CS-001	**14-03-0325-4-A**	**03/05/14 08:07**	**Other**	**GC 31**	**03/06/14**	**03/07/14 04:44**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
596-IV-P/S-CS-002	**14-03-0325-5-A**	**03/05/14 08:16**	**Other**	**GC 31**	**03/06/14**	**03/07/14 00:17**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

596-IV-P/S-CS-003	**14-03-0325-6-A**	**03/05/14 08:21**	**Other**	**GC 31**	**03/06/14**	**03/07/14 00:36**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#871	**14-03-0325-7-A**	**03/05/14 09:55**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 00:55**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

#872	**14-03-0325-8-A**	**03/05/14 09:56**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 01:14**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#873	**14-03-0325-9-A**	**03/05/14 09:57**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 01:33**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

#874	**14-03-0325-10-A**	**03/05/14 09:58**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 01:52**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#829-9	**14-03-0325-11-A**	**03/05/14 10:08**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 02:12**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

#827-9	**14-03-0325-12-A**	**03/05/14 10:10**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 02:31**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#828-9	**14-03-0325-13-A**	**03/05/14 10:12**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 02:50**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#875	**14-03-0325-14-A**	**03/05/14 10:23**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 03:09**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#876	**14-03-0325-15-A**	**03/05/14 10:24**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 03:28**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

#877	**14-03-0325-16-A**	**03/05/14 10:25**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 03:47**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#878	**14-03-0325-17-A**	**03/05/14 10:27**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 03:47**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

580-IV-F/F-SS-001	**14-03-0325-18-A**	**03/05/14 12:59**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 04:25**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	86	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	35	60-125	2,6
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
580-IV-F/F-SS-002	**14-03-0325-19-A**	**03/05/14 13:01**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 05:03**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

580-IV-F/F-SS-003	**14-03-0325-20-A**	**03/05/14 13:05**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 05:22**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	160	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	33	60-125	2,6
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-207**	**N/A**	**Solid**	**GC 31**	**03/05/14**	**03/06/14 19:12**	**140305L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0272-2	**Sample**	**Solid**	**GC 47**	**03/06/14**	**03/06/14 20:49**	**140306S12**
14-03-0272-2	**Matrix Spike**	**Solid**	**GC 47**	**03/06/14**	**03/06/14 20:15**	**140306S12**
14-03-0272-2	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**03/06/14**	**03/06/14 20:32**	**140306S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	368.6	92	354.4	89	80-120	4	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#827-9	**Sample**	**Solid**	**GC 31**	**03/06/14**	**03/07/14 02:31**	**140305S19**
#827-9	**Matrix Spike**	**Solid**	**GC 31**	**03/05/14**	**03/06/14 19:50**	**140305S19**
#827-9	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/05/14**	**03/06/14 20:09**	**140305S19**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	110.1	110	108.0	108	50-135	2	0-25	
Aroclor-1260	ND	100.0	102.4	102	102.1	102	50-135	0	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-807	**LCS**	**Solid**	**GC 47**	**03/06/14**	**03/06/14 19:59**	**140306B12A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	381.0	95	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/05/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0325
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-207	**LCS**	**Solid**	**GC 31**	**03/05/14**	**03/06/14 18:53**	**140305L19**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	107.5	108	50-135	
Aroclor-1260	100.0	95.89	96	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-0325

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-0325

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25737

PROJECT NAME: Former Pechiney Cast Plate Facility		DATE: 3-5-14	PAGE 1 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS: 14-03-0325
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 Hour			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES: PCBs EPA 8082

	DATE	TIME	SAMPLE NUMBER	PCBs EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/5/14	0745	594-1V-P/S-CS-001	X	4oz glass Jar	O			X		1	
2		0750	594-1V-P/S-CS-002	X		O			X		1	
3		0756	594-1V-P/S-CS-003	X		O			X		1	
4		0807	596-1V-P/S-CS-001	X		O			X		1	
5		0816	596-1V-P/S-CS-002	X		O			X		1	
6		0821	596-1V-P/S-CS-003	X		O			X		1	
7		0955	#871	X		S			X		1	
8		0956	#872	X		S			X		1	
9		0957	#873	X		S			X		1	
10		0958	#874	X		S			X		1	
11		1008	#829-9	X		S			X		1	
12		1010	#827-9	X		S			X		1	
13		1012	#828-9	X		S			X		1	
14		1023	#875	X		S			X		1	
15		1024	#876	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	3/5/14	1400	SIGNATURE: PRINTED NAME: Stephen Amy COMPANY: Amec	3/5/14	1400
SIGNATURE: PRINTED NAME: Stephen Amy COMPANY: Amec	3/5/14	1634	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEL	3/5/14	1634
SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: CEL	3/5/14	1751	SIGNATURE: PRINTED NAME: Yan Liao COMPANY: CEL	3/5/14	1751

TOTAL NUMBER OF CONTAINERS: 15/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB25740

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 3-5-14 PAGE 2 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS: 0305
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	EPA 8015 TPH	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	3-5-14	1025	#877	X		4 oz glass jar	S			X		1	
17		1027	#878	X			S			X		1	
18		1259	580-IV-F/F-SS-001	X	X		S			X		1	
19		1301	580-IV-F/F-SS-002	X	X		S			X		1	
20		1305	580-IV-F/F-SS-003	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	3/5/14	1400	SIGNATURE: PRINTED NAME: Stephen Anning COMPANY: AMEC	3/5/14	1400
SIGNATURE: PRINTED NAME: Stephen Anning COMPANY: AMEC	3/5/14	1631	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CRL	3/5/14	1634
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CRL	3/5/14	1751	SIGNATURE: PRINTED NAME: Yan Liao COMPANY: CRL	3/5/14	1751

TOTAL NUMBER OF CONTAINERS: 5/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-03- 0 3 2 5

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/5/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** WZ

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** WZ

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 862

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 862

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Supplemental Report 2

The original report has been revised/corrected.

WORK ORDER NUMBER: 14-03-0469

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Lindan Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/16/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-03-0469

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Work Order Narrative

Work Order: 14-03-0469 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 03/06/14. They were assigned to Work Order 14-03-0469.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0469
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	03/06/14 17:00
		Number of Containers:	8
Attn:	Lindan Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
142-I-P/S-CS-011	14-03-0469-1	03/06/14 07:55	1	Other
563-IV-F/F-SS-010	14-03-0469-2	03/06/14 08:15	1	Solid
563-IV-F/F-SS-011	14-03-0469-3	03/06/14 08:16	1	Solid
#898	14-03-0469-4	03/06/14 08:19	1	Solid
325-I-P/S-SS-003	14-03-0469-5	03/06/14 10:40	1	Solid
564-IV-F/F-SS-010	14-03-0469-6	03/06/14 13:28	1	Solid
605-IIA-P/S-O-001	14-03-0469-7	03/06/14 13:55	1	Other
#899	14-03-0469-8	03/06/14 14:35	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-0469
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/06/14
Attn:	Lindan Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
563-IV-F/F-SS-011 (14-03-0469-3)						
C15-C16	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	58		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	46		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	42		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	20		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	25		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	8.8		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	270		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#898 (14-03-0469-4)						
C9-C10	170		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	74		50	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	84		50	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	210		50	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	370		50	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	530		50	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	450		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	400		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	560		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	820		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	570		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	680		50	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	510		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	5400		50	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	1300		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	120		50	ug/kg	EPA 8082	EPA 3540C
sec-Butylbenzene	5.7		5.0	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	5.8		5.0	ug/kg	EPA 8260B	EPA 5030C

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-0469
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/06/14
Attn:	Lindan Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
605-IIA-P/S-O-001 (14-03-0469-7)						
Antimony	2.67		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	72.1		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	20.9		0.245	mg/kg	EPA 6010B	EPA 3050B
Cadmium	17.5		0.490	mg/kg	EPA 6010B	EPA 3050B
Chromium	166		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	1.68		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	2660		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	11.2		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	34.9		0.245	mg/kg	EPA 6010B	EPA 3050B
Silver	0.391		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	17.3		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	9680		98.0	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	30000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	3000		500	ug/kg	EPA 8082	EPA 3540C
#899 (14-03-0469-8)						
Barium	117		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.505		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.51		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	14.8		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	3.43		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.87		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	23.0		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	172		0.995	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.291		0.0847	mg/kg	EPA 7471A	EPA 7471A Total

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-010	**14-03-0469-2-A**	**03/06/14 08:15**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 13:50**	**140307B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	71	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-011	**14-03-0469-3-A**	**03/06/14 08:16**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 14:07**	**140307B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	13	5.0	0.990	
C17-C18	58	5.0	0.990	
C19-C20	46	5.0	0.990	
C21-C22	42	5.0	0.990	
C23-C24	24	5.0	0.990	
C25-C28	20	5.0	0.990	
C29-C32	25	5.0	0.990	
C33-C36	15	5.0	0.990	
C37-C40	8.8	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	270	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#898	**14-03-0469-4-A**	**03/06/14 08:19**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 17:30**	**140307B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	9.90	
C7	ND	50	9.90	
C8	ND	50	9.90	
C9-C10	170	50	9.90	
C11-C12	74	50	9.90	
C13-C14	84	50	9.90	
C15-C16	210	50	9.90	
C17-C18	370	50	9.90	
C19-C20	530	50	9.90	
C21-C22	450	50	9.90	
C23-C24	400	50	9.90	
C25-C28	560	50	9.90	
C29-C32	820	50	9.90	
C33-C36	570	50	9.90	
C37-C40	680	50	9.90	
C41-C44	510	50	9.90	
C6-C44 Total	5400	50	9.90	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	78	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-010	**14-03-0469-6-A**	**03/06/14 13:28**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 14:23**	**140307B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	72	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-812**	**N/A**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 12:42**	**140307B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	72	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-O-001	**14-03-0469-7-A**	**03/06/14 13:55**	**Other**	**ICP 7300**	**03/06/14**	**03/07/14 12:44**	**140306L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	2.67	0.735	0.980	
Arsenic	ND	0.735	0.980	
Barium	72.1	0.490	0.980	
Beryllium	20.9	0.245	0.980	
Cadmium	17.5	0.490	0.980	
Chromium	166	0.245	0.980	
Cobalt	1.68	0.245	0.980	
Copper	2660	0.490	0.980	
Lead	11.2	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	34.9	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	0.391	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	17.3	0.245	0.980	

605-IIA-P/S-O-001	**14-03-0469-7-A**	**03/06/14 13:55**	**Other**	**ICP 7300**	**03/06/14**	**03/10/14 11:24**	**140306L03**

Parameter	Result	RL	DF	Qualifiers
Zinc	9680	98.0	98.0	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#899	**14-03-0469-8-A**	**03/06/14 14:35**	**Solid**	**ICP 7300**	**03/06/14**	**03/07/14 12:45**	**140306L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	ND	0.746	0.995	
Barium	117	0.498	0.995	
Beryllium	0.505	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	11.1	0.249	0.995	
Cobalt	8.51	0.249	0.995	
Copper	14.8	0.498	0.995	
Lead	3.43	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	8.87	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	23.0	0.249	0.995	
Zinc	172	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18108**	**N/A**	**Solid**	**ICP 7300**	**03/06/14**	**03/06/14 20:52**	**140306L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-O-001	**14-03-0469-7-A**	**03/06/14 13:55**	**Other**	**Mercury**	**03/07/14**	**03/07/14 13:11**	**140307L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#899	**14-03-0469-8-A**	**03/06/14 14:35**	**Solid**	**Mercury**	**03/07/14**	**03/07/14 13:13**	**140307L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.291	0.0847	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-77**	**N/A**	**Solid**	**Mercury**	**03/07/14**	**03/07/14 13:33**	**140307L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
142-I-P/S-CS-011	**14-03-0469-1-A**	**03/06/14 07:55**	**Other**	**GC 31**	**03/06/14**	**03/08/14 09:59**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

563-IV-F/F-SS-010	**14-03-0469-2-A**	**03/06/14 08:15**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 10:18**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-011	**14-03-0469-3-A**	**03/06/14 08:16**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 10:37**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

#898	**14-03-0469-4-A**	**03/06/14 08:19**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 10:56**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	120	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#898	**14-03-0469-4-A**	**03/06/14 08:19**	**Solid**	**GC 31**	**03/06/14**	**03/10/14 14:25**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1300	250	4.97	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
325-I-P/S-SS-003	**14-03-0469-5-A**	**03/06/14 10:40**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 11:15**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
564-IV-F/F-SS-010	**14-03-0469-6-A**	**03/06/14 13:28**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 11:35**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

605-IIA-P/S-O-001	**14-03-0469-7-A**	**03/06/14 13:55**	**Other**	**GC 31**	**03/06/14**	**03/10/14 15:03**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	3000	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	191	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-O-001	**14-03-0469-7-A**	**03/06/14 13:55**	**Other**	**GC 31**	**03/06/14**	**03/10/14 14:44**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	30000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	186	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#899	**14-03-0469-8-A**	**03/06/14 14:35**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 12:13**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-209**	**N/A**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 09:02**	**140306L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-010	**14-03-0469-2-A**	**03/06/14 08:15**	**Solid**	**GC/MS BB**	**03/06/14**	**03/06/14 23:55**	**140306L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 8

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
563-IV-F/F-SS-011	**14-03-0469-3-A**	**03/06/14 08:16**	**Solid**	**GC/MS BB**	**03/06/14**	**03/07/14 00:22**	**140306L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 8

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#898	**14-03-0469-4-A**	**03/06/14 08:19**	**Solid**	**GC/MS BB**	**03/06/14**	**03/07/14 00:49**	**140306L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	5.7	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 8

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	5.8	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-132	
Dibromofluoromethane	106	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8246**	**N/A**	**Solid**	**GC/MS BB**	**03/06/14**	**03/06/14 15:21**	**140306L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 8 of 8

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	105	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
564-IV-F/F-SS-010	**Sample**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 14:23**	**140307S01**
564-IV-F/F-SS-010	**Matrix Spike**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 13:16**	**140307S01**
564-IV-F/F-SS-010	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 13:32**	**140307S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	360.7	90	343.8	86	64-130	5	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0331-1	**Sample**	**Solid**	**ICP 7300**	**03/06/14**	**03/06/14 21:02**	**140306S03**
14-03-0331-1	**Matrix Spike**	**Solid**	**ICP 7300**	**03/06/14**	**03/06/14 21:00**	**140306S03**
14-03-0331-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/06/14**	**03/06/14 21:01**	**140306S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.557	26	5.644	23	50-115	15	0-20	3
Arsenic	6.030	25.00	33.68	111	32.72	107	75-125	3	0-20	
Barium	38.06	25.00	69.78	127	66.94	116	75-125	4	0-20	3
Beryllium	0.3086	25.00	26.90	106	26.94	107	75-125	0	0-20	
Cadmium	ND	25.00	25.96	104	25.99	104	75-125	0	0-20	
Chromium	10.19	25.00	38.04	111	37.87	111	75-125	0	0-20	
Cobalt	5.314	25.00	33.44	113	32.78	110	75-125	2	0-20	
Copper	54.15	25.00	84.85	123	80.06	104	75-125	6	0-20	
Lead	60.81	25.00	97.96	149	89.94	117	75-125	9	0-20	3
Molybdenum	0.3023	25.00	23.67	93	23.43	93	75-125	1	0-20	
Nickel	6.502	25.00	34.60	112	33.74	109	75-125	3	0-20	
Selenium	ND	25.00	23.53	94	23.10	92	75-125	2	0-20	
Silver	ND	12.50	13.32	107	13.33	107	75-125	0	0-20	
Thallium	ND	25.00	23.93	96	24.13	97	75-125	1	0-20	
Vanadium	22.55	25.00	50.72	113	49.84	109	75-125	2	0-20	
Zinc	52.48	25.00	85.36	132	82.82	121	75-125	3	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0436-1	**Sample**	**Solid**	**Mercury**	**03/07/14**	**03/07/14 13:38**	**140307S03**
14-03-0436-1	**Matrix Spike**	**Solid**	**Mercury**	**03/07/14**	**03/07/14 13:40**	**140307S03**
14-03-0436-1	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**03/07/14**	**03/07/14 13:47**	**140307S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8336	100	0.8883	106	71-137	6	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
325-I-P/S-SS-003	**Sample**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 11:15**	**140306S20**
325-I-P/S-SS-003	**Matrix Spike**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 09:21**	**140306S20**
325-I-P/S-SS-003	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 09:40**	**140306S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	95.20	95	95.31	95	50-135	0	0-25	
Aroclor-1260	ND	100.0	98.84	99	100.1	100	50-135	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0427-1	**Sample**	**Solid**	**GC/MS BB**	**03/06/14**	**03/06/14 16:15**	**140306S01**
14-03-0427-1	**Matrix Spike**	**Solid**	**GC/MS BB**	**03/06/14**	**03/06/14 18:04**	**140306S01**
14-03-0427-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS BB**	**03/06/14**	**03/06/14 18:31**	**140306S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	43.78	88	43.22	86	61-127	1	0-20	
Carbon Tetrachloride	ND	50.00	43.13	86	43.59	87	51-135	1	0-29	
Chlorobenzene	ND	50.00	46.24	92	45.71	91	57-123	1	0-20	
1,2-Dibromoethane	ND	50.00	46.66	93	45.55	91	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	47.01	94	46.59	93	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	43.29	87	42.16	84	80-120	3	0-20	
1,1-Dichloroethene	ND	50.00	48.90	98	48.90	98	47-143	0	0-25	
Ethylbenzene	ND	50.00	47.26	95	46.66	93	57-129	1	0-22	
Toluene	ND	50.00	45.92	92	45.05	90	63-123	2	0-20	
Trichloroethene	ND	50.00	42.83	86	43.63	87	44-158	2	0-20	
Vinyl Chloride	ND	50.00	49.51	99	50.95	102	49-139	3	0-47	
p/m-Xylene	ND	100.0	93.57	94	92.32	92	70-130	1	0-30	
o-Xylene	ND	50.00	48.68	97	47.62	95	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	48.22	96	48.22	96	57-123	0	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-812	**LCS**	**Solid**	**GC 47**	**03/07/14**	**03/07/14 12:59**	**140307B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	357.6	89	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18108	**LCS**	**Solid**	**ICP 7300**	**03/06/14**	**03/06/14 20:54**	**140306L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.15	97	80-120	73-127	
Arsenic	25.00	25.10	100	80-120	73-127	
Barium	25.00	25.83	103	80-120	73-127	
Beryllium	25.00	24.59	98	80-120	73-127	
Cadmium	25.00	25.51	102	80-120	73-127	
Chromium	25.00	25.78	103	80-120	73-127	
Cobalt	25.00	27.87	111	80-120	73-127	
Copper	25.00	25.39	102	80-120	73-127	
Lead	25.00	25.89	104	80-120	73-127	
Molybdenum	25.00	25.12	100	80-120	73-127	
Nickel	25.00	27.03	108	80-120	73-127	
Selenium	25.00	23.92	96	80-120	73-127	
Silver	12.50	13.27	106	80-120	73-127	
Thallium	25.00	26.41	106	80-120	73-127	
Vanadium	25.00	24.71	99	80-120	73-127	
Zinc	25.00	25.19	101	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-77	**LCS**	**Solid**	**Mercury**	**03/07/14**	**03/07/14 13:35**	**140307L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.9410	113	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-209	**LCS**	**Solid**	**GC 31**	**03/06/14**	**03/08/14 08:43**	**140306L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	94.34	94	50-135	
Aroclor-1260	100.0	95.51	96	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/06/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0469
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8246	**LCS**	**Solid**	**GC/MS BB**	**03/06/14**	**03/06/14 14:22**	**140306L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	47.68	95	78-120	71-127	
Carbon Tetrachloride	50.00	49.00	98	49-139	34-154	
Chlorobenzene	50.00	49.99	100	79-120	72-127	
1,2-Dibromoethane	50.00	49.87	100	80-120	73-127	
1,2-Dichlorobenzene	50.00	51.20	102	75-120	68-128	
1,2-Dichloroethane	50.00	47.57	95	80-120	73-127	
1,1-Dichloroethene	50.00	51.89	104	74-122	66-130	
Ethylbenzene	50.00	50.37	101	76-120	69-127	
Toluene	50.00	49.04	98	77-120	70-127	
Trichloroethene	50.00	46.40	93	80-120	73-127	
Vinyl Chloride	50.00	56.80	114	68-122	59-131	
p/m-Xylene	100.0	100.8	101	75-125	67-133	
o-Xylene	50.00	51.84	104	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	50.50	101	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-03-0469

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	823	GC/MS BB	2

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Glossary of Terms and Qualifiers

Work Order: 14-03-0469 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Lee, Zhur [zhur.lee@amec.com]
Sent: Thursday, June 12, 2014 3:34 PM
To: Stephen Nowak
Cc: Costamagna, Daniel G
Subject: Revisions to multiple work orders for Pechiney

Stephen,

Below is a list of lab reports for the Pechiney project and the Sample IDs that should be revised.

Lab Report #	Sample ID # (as it appears on lab report)	Should Be Revised To
13-11-1038	221-I-P/S-CS-001	221-I-P/S-SS-001
13-11-1426	132-IIA-P/S-CS013	132-IIA-P/S-CS-013
	132-IIA-P/S-CS014	132-IIA-P/S-CS-014
13-11-1505	549-6	#549-6
	550-6	#550-6
	551-6	#551-6
14-01-1158	DC-382	DC-382-1
14-01-1160	DC378	DC-378
	DC379	DC-379
	DC380	DC-380
14-01-1574	DC-382	DC-382-2
14-03-0469_s1	605-11A-P/S-O-001	605-IIA-P/S-O-001
14-03-0682	575-IIA-P/S-CS-001	575-IV-P/S-CS-001*
14-05-0076	821-IV-C/S-SS-001	821-IV-CS-SS-001
	820-IV-C/S-SS-001	820-IV-CS-SS-001
13-10-1733	0142-1-P/S-SS-001	0142-I-P/S-SS-001
	0142-1-P/S-SS-002	0142-I-P/S-SS-002
	0142-1-P/S-SS-003	0142-I-P/S-SS-003
	0142-1-P/S-SS-004	0142-I-P/S-SS-004
	103-1-P-SS-001	103-I-P-SS-001
	103-1-P-SS-002	103-I-P-SS-002
	103-1-P-SS-003	103-I-P-SS-003
	60-1-PP-0-002	60-I-PP-O-002
13-12-0393	301-11A-F/F-SS-001	301-IIA-F/F-SS-001
13-11-0580	167-I-P/S-S-003	167-I-P/S-SS-003

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13-11-0580_s1	167-I-P/S-S-003	167-I-P/S-SS-003

Please provide revised reports once the updates have been made. Let me know if you have any questions, thank you.

Zhur Lee
Project Coordinator
AMEC
Environment & Infrastructure
121 Innovation Drive, Suite 200, Irvine, CA 92617
Tel 949-642-0245 x1591, Fax 949-642-4474
zhur.lee@amec.com

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Stephen Nowak

From: Lee, Zhur [zhur.lee@amec.com]
Sent: Tuesday, May 20, 2014 9:50 AM
To: Stephen Nowak
Cc: Costamagna, Daniel G
Subject: Work Order Number: 14-03-0469 needs revision

Stephen,

For the laboratory report number 14-03-0469, please update the sample number 325-I-P/S-SS-001 to 325-I-P/S-SS-003. Please provide an updated report incorporating the revision.

Thank you,

Zhur Lee
Project Coordinator
AMEC
Environment & Infrastructure
121 Innovation Drive, Suite 200, Irvine, CA 92617
Tel 949-642-0245 x1591, Fax 949-642-4474
zhur.lee@amec.com

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CHAIN-OF-CUSTODY RECORD

NB 31279

PROJECT NAME: PECHANEY

PROJECT NUMBER: 10627 0030

RESULTS TO: LINDA CONLAN

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: COURIER

LABORATORY NAME: CAL SCIENCE

LABORATORY ADDRESS:

LABORATORY CONTACT: STEVE NGWUNK

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC IRVINE

DATE: 3/6/14

PAGE 1 OF 1

REPORTING REQUIREMENTS:

14-03-0469

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEV CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	8260 VOCs	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/6/14	0755	142-I-P/S-CS-011	X				4oz JAR	O			X		1	concrete
2		0815	563-IV-F/F-SS-010	X	X	X			S			X		1	
3		0816	563-IV-F/F-SS-011	X	X	X			S			X		1	
4		0819	#898	X	X	X			S			X		1	
5		1040	~~350~~ 325 I-P/S-SS-001	X					S			X		1	
6		1328	564-IV-F/F-SS-010	X	X				S			X		1	
7		1355	605-IIA-P/S-0-001	X			X		O			X		1	
8	3/6/14	1435	#899	X			X	4oz Jar	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Kev Curnutt COMPANY: AMEC	3/6/14	1400	SIGNATURE: [signature] PRINTED NAME: Stephen Ngwunk COMPANY: AMEC	3/6/14	1400
SIGNATURE: [signature] PRINTED NAME: Stephen Ngwunk COMPANY: AMEC	3/6/14	1610	SIGNATURE: [signature] PRINTED NAME: Denny Irawan COMPANY: CSL	3/06/14	16.10
SIGNATURE: [signature] PRINTED NAME: Denny Irawan COMPANY: CSL	3/06/14	17.00	SIGNATURE: [signature] PRINTED NAME: Yan Liao COMPANY: CSL	3/06/14	1700

TOTAL NUMBER OF CONTAINERS: 8

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-0469

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/06/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.1 °C - 0.3 °C (CF) = 2.8 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Supplemental Report 1

The original report has been revised/corrected.

WORK ORDER NUMBER: 14-03-0682

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/18/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-03-0682

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Work Order Narrative

Work Order: 14-03-0682 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 03/10/14. They were assigned to Work Order 14-03-0682.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0682
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	03/10/14 16:21
		Number of Containers:	18
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
591-IV-P/S-SS-001	14-03-0682-1	03/10/14 10:43	1	Solid
587-IV-P/S-SS-001	14-03-0682-2	03/10/14 10:45	1	Solid
613-IIB-P/S-SS-001	14-03-0682-3	03/10/14 13:55	1	Solid
DC-397	14-03-0682-4	03/10/14 12:59	1	Other
DC-398	14-03-0682-5	03/10/14 13:04	1	Other
606-IIA-F/F-CS-001	14-03-0682-6	03/10/14 13:10	1	Other
607-IIA-F/F-CS-001	14-03-0682-7	03/10/14 13:17	1	Other
608-IIA-F/F-CS-001	14-03-0682-8	03/10/14 13:22	1	Other
576-IIA-P/S-CS-001	14-03-0682-9	03/10/14 13:35	1	Other
575-IV-P/S-CS-001	14-03-0682-10	03/10/14 13:42	1	Other
570-IIIA-P/S-SS-001	14-03-0682-11	03/10/14 13:49	1	Solid
548-I-P/S-SS-024	14-03-0682-12	03/10/14 14:35	1	Solid
548-I-P/S-SS-025	14-03-0682-13	03/10/14 14:36	1	Solid
#904	14-03-0682-14	03/10/14 14:58	1	Solid
#901	14-03-0682-15	03/10/14 14:59	1	Solid
#902	14-03-0682-16	03/10/14 15:03	1	Solid
#900	14-03-0682-17	03/10/14 15:04	1	Solid
#903	14-03-0682-18	03/10/14 15:06	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0682
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	03/10/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
587-IV-P/S-SS-001 (14-03-0682-2)						
Aroclor-1268	66		50	ug/kg	EPA 8082	EPA 3540C
613-IIB-P/S-SS-001 (14-03-0682-3)						
Arsenic	1.59		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	70.7		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.278		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	8.87		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.71		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	16.3		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	8.16		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.40		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	19.5		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	592		0.980	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	92		50	ug/kg	EPA 8082	EPA 3540C
DC-398 (14-03-0682-5)						
Aroclor-1248	55		50	ug/kg	EPA 8082	EPA 3540C
606-IIA-F/F-CS-001 (14-03-0682-6)						
Aroclor-1248	15000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	930		500	ug/kg	EPA 8082	EPA 3540C
608-IIA-F/F-CS-001 (14-03-0682-8)						
Aroclor-1248	380		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	110		50	ug/kg	EPA 8082	EPA 3540C
576-IIA-P/S-CS-001 (14-03-0682-9)						
Aroclor-1248	240		50	ug/kg	EPA 8082	EPA 3540C
#900 (14-03-0682-17)						
Aroclor-1248	52		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
613-IIB-P/S-SS-001	**14-03-0682-3-A**	**03/10/14 13:55**	**Solid**	**ICP 7300**	**03/10/14**	**03/11/14 21:05**	**140310L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	1.59	0.735	0.980	
Barium	70.7	0.490	0.980	
Beryllium	0.278	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	8.87	0.245	0.980	
Cobalt	6.71	0.245	0.980	
Copper	16.3	0.490	0.980	
Lead	8.16	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	7.40	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	19.5	0.245	0.980	
Zinc	592	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18126**	**N/A**	**Solid**	**ICP 7300**	**03/10/14**	**03/10/14 15:36**	**140310L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
613-IIB-P/S-SS-001	**14-03-0682-3-a**	**03/10/14 13:55**	**Solid**	**Mercury**	**03/10/14**	**03/11/14 11:51**	**140310L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0781	1.00	

Method Blank	**099-16-272-80**	**N/A**	**Solid**	**Mercury**	**03/10/14**	**03/10/14 13:55**	**140310L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
591-IV-P/S-SS-001	**14-03-0682-1-A**	**03/10/14 10:43**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 05:56**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	74	50-130	

587-IV-P/S-SS-001	**14-03-0682-2-A**	**03/10/14 10:45**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 05:37**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	66	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
613-IIB-P/S-SS-001	**14-03-0682-3-A**	**03/10/14 13:55**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 00:12**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	92	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

DC-397	**14-03-0682-4-A**	**03/10/14 12:59**	**Other**	**GC 31**	**03/10/14**	**03/12/14 00:31**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-398	**14-03-0682-5-A**	**03/10/14 13:04**	**Other**	**GC 31**	**03/10/14**	**03/12/14 00:51**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	55	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

606-IIA-F/F-CS-001	**14-03-0682-6-A**	**03/10/14 13:10**	**Other**	**GC 31**	**03/10/14**	**03/12/14 14:29**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	930	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	70	60-125	
2,4,5,6-Tetrachloro-m-Xylene	78	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
606-IIA-F/F-CS-001	**14-03-0682-6-A**	**03/10/14 13:10**	**Other**	**GC 31**	**03/10/14**	**03/12/14 14:48**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	15000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
607-IIA-F/F-CS-001	**14-03-0682-7-A**	**03/10/14 13:17**	**Other**	**GC 31**	**03/10/14**	**03/12/14 01:48**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
608-IIA-F/F-CS-001	**14-03-0682-8-A**	**03/10/14 13:22**	**Other**	**GC 31**	**03/10/14**	**03/12/14 02:07**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	380	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	110	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	74	50-130	

576-IIA-P/S-CS-001	**14-03-0682-9-A**	**03/10/14 13:35**	**Other**	**GC 31**	**03/10/14**	**03/12/14 02:26**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	240	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	75	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
575-IV-P/S-CS-001	**14-03-0682-10-A**	**03/10/14 13:42**	**Other**	**GC 31**	**03/10/14**	**03/12/14 02:45**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	77	50-130	

570-IIIA-P/S-SS-001	**14-03-0682-11-A**	**03/10/14 13:49**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 03:04**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	73	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
548-I-P/S-SS-024	**14-03-0682-12-A**	**03/10/14 14:35**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 03:23**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	76	50-130	

548-I-P/S-SS-025	**14-03-0682-13-A**	**03/10/14 14:36**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 03:42**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	77	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#904	**14-03-0682-14-A**	**03/10/14 14:58**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 04:01**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	76	50-130	

#901	**14-03-0682-15-A**	**03/10/14 14:59**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 04:20**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	60-125	
2,4,5,6-Tetrachloro-m-Xylene	71	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#902	**14-03-0682-16-A**	**03/10/14 15:03**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 04:40**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	60-125	
2,4,5,6-Tetrachloro-m-Xylene	72	50-130	

#900	**14-03-0682-17-A**	**03/10/14 15:04**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 04:59**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	52	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	73	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#903	**14-03-0682-18-A**	**03/10/14 15:06**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 05:18**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

Method Blank	**099-02-003-210**	**N/A**	**Solid**	**GC 31**	**03/10/14**	**03/11/14 23:15**	**140310L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	60-125	
2,4,5,6-Tetrachloro-m-Xylene	78	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0623-1	**Sample**	**Solid**	**ICP 7300**	**03/10/14**	**03/11/14 15:47**	**140310S02**
14-03-0623-1	**Matrix Spike**	**Solid**	**ICP 7300**	**03/10/14**	**03/11/14 15:48**	**140310S02**
14-03-0623-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/10/14**	**03/11/14 15:49**	**140310S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	3.511	14	2.526	10	50-115	33	0-20	3,4
Arsenic	3.187	25.00	27.86	99	27.21	96	75-125	2	0-20	
Barium	81.73	25.00	97.32	62	94.89	53	75-125	3	0-20	3
Beryllium	0.5239	25.00	27.26	107	27.13	106	75-125	0	0-20	
Cadmium	1.747	25.00	26.78	100	26.53	99	75-125	1	0-20	
Chromium	12.31	25.00	37.67	101	36.82	98	75-125	2	0-20	
Cobalt	6.076	25.00	33.02	108	32.25	105	75-125	2	0-20	
Copper	5.214	25.00	31.55	105	31.94	107	75-125	1	0-20	
Lead	6.360	25.00	31.08	99	30.35	96	75-125	2	0-20	
Molybdenum	ND	25.00	23.45	94	23.30	93	75-125	1	0-20	
Nickel	8.426	25.00	34.46	104	33.67	101	75-125	2	0-20	
Selenium	ND	25.00	21.13	85	21.63	87	75-125	2	0-20	
Silver	ND	12.50	13.36	107	13.40	107	75-125	0	0-20	
Thallium	ND	25.00	23.64	95	23.25	93	75-125	2	0-20	
Vanadium	23.70	25.00	47.48	95	46.70	92	75-125	2	0-20	
Zinc	58.95	25.00	76.16	69	79.07	81	75-125	4	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0623-1	**Sample**	**Solid**	**Mercury**	**03/10/14**	**03/10/14 14:01**	**140310S05**
14-03-0623-1	**Matrix Spike**	**Solid**	**Mercury**	**03/10/14**	**03/10/14 14:04**	**140310S05**
14-03-0623-1	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**03/10/14**	**03/10/14 14:06**	**140310S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.05658	0.8350	0.7672	85	0.7878	88	71-137	3	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
613-IIB-P/S-SS-001	**Sample**	**Solid**	**GC 31**	**03/10/14**	**03/12/14 00:12**	**140310S20**
613-IIB-P/S-SS-001	**Matrix Spike**	**Solid**	**GC 31**	**03/10/14**	**03/11/14 23:34**	**140310S20**
613-IIB-P/S-SS-001	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/10/14**	**03/11/14 23:53**	**140310S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	89.22	89	81.16	81	50-135	9	0-25	
Aroclor-1260	ND	100.0	91.10	91	87.69	88	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-03-0623-1	**Sample**	**Solid**	**ICP 7300**	**03/10/14 00:00**	**03/11/14 15:47**	**140310S02**
14-03-0623-1	**PDS**	**Solid**	**ICP 7300**	**03/10/14 00:00**	**03/11/14 15:50**	**140310S02**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Antimony	ND	25.00	22.76	91	75-125	
Arsenic	3.187	25.00	28.67	102	75-125	
Barium	81.73	25.00	105.9	97	75-125	
Beryllium	0.5239	25.00	26.80	105	75-125	
Cadmium	1.747	25.00	26.90	101	75-125	
Chromium	12.31	25.00	37.75	102	75-125	
Cobalt	6.076	25.00	32.73	107	75-125	
Copper	5.214	25.00	31.66	106	75-125	
Lead	6.360	25.00	31.37	100	75-125	
Molybdenum	ND	25.00	25.66	103	75-125	
Nickel	8.426	25.00	33.94	102	75-125	
Selenium	ND	25.00	23.74	95	75-125	
Silver	ND	12.50	10.36	83	75-125	
Thallium	ND	25.00	22.93	92	75-125	
Vanadium	23.70	25.00	48.42	99	75-125	
Zinc	58.95	25.00	85.88	108	75-125	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - PDS

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-03-0623-1	**Sample**	**Solid**	**Mercury**	**03/10/14 00:00**	**03/10/14 14:01**	**140310S05**
14-03-0623-1	**PDS**	**Solid**	**Mercury**	**03/10/14 00:00**	**03/10/14 14:08**	**140310S05**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Mercury	0.05658	0.8350	0.7957	89	75-125	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18126	**LCS**	**Solid**	**ICP 7300**	**03/10/14**	**03/10/14 15:37**	**140310L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.96	100	80-120	73-127	
Arsenic	25.00	24.93	100	80-120	73-127	
Barium	25.00	25.98	104	80-120	73-127	
Beryllium	25.00	24.53	98	80-120	73-127	
Cadmium	25.00	25.74	103	80-120	73-127	
Chromium	25.00	25.95	104	80-120	73-127	
Cobalt	25.00	28.16	113	80-120	73-127	
Copper	25.00	25.95	104	80-120	73-127	
Lead	25.00	26.43	106	80-120	73-127	
Molybdenum	25.00	25.64	103	80-120	73-127	
Nickel	25.00	27.40	110	80-120	73-127	
Selenium	25.00	23.96	96	80-120	73-127	
Silver	12.50	13.66	109	80-120	73-127	
Thallium	25.00	27.29	109	80-120	73-127	
Vanadium	25.00	24.92	100	80-120	73-127	
Zinc	25.00	25.47	102	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-80	**LCS**	**Solid**	**Mercury**	**03/10/14**	**03/10/14 13:57**	**140310L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8214	98	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/10/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0682
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-210	**LCS**	**Solid**	**GC 31**	**03/10/14**	**03/11/14 22:56**	**140310L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	85.31	85	50-135	
Aroclor-1260	100.0	72.02	72	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-03-0682

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8082	EPA 3540C	669	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-03-0682 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Lee, Zhur [zhur.lee@amec.com]
Sent: Thursday, June 12, 2014 3:34 PM
To: Stephen Nowak
Cc: Costamagna, Daniel G
Subject: Revisions to multiple work orders for Pechiney

Stephen,

Below is a list of lab reports for the Pechiney project and the Sample IDs that should be revised.

Lab Report #	Sample ID # (as it appears on lab report)	Should Be Revised To
13-11-1038	221-I-P/S-CS-001	221-I-P/S-SS-001
13-11-1426	132-IIA-P/S-CS013	132-IIA-P/S-CS-013
	132-IIA-P/S-CS014	132-IIA-P/S-CS-014
13-11-1505	549-6	#549-6
	550-6	#550-6
	551-6	#551-6
14-01-1158	DC-382	DC-382-1
14-01-1160	DC378	DC-378
	DC379	DC-379
	DC380	DC-380
14-01-1574	DC-382	DC-382-2
14-03-0469_s1	605-11A-P/S-O-001	605-IIA-P/S-O-001
14-03-0682	575-IIA-P/S-CS-001	575-IV-P/S-CS-001*
14-05-0076	821-IV-C/S-SS-001	821-IV-CS-SS-001
	820-IV-C/S-SS-001	820-IV-CS-SS-001
13-10-1733	0142-1-P/S-SS-001	0142-I-P/S-SS-001
	0142-1-P/S-SS-002	0142-I-P/S-SS-002
	0142-1-P/S-SS-003	0142-I-P/S-SS-003
	0142-1-P/S-SS-004	0142-I-P/S-SS-004
	103-1-P-SS-001	103-I-P-SS-001
	103-1-P-SS-002	103-I-P-SS-002
	103-1-P-SS-003	103-I-P-SS-003
	60-1-PP-0-002	60-I-PP-O-002
13-12-0393	301-11A-F/F-SS-001	301-IIA-F/F-SS-001
13-11-0580	167-I-P/S-S-003	167-I-P/S-SS-003

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13-11-0580_s1	167-I-P/S-S-003	167-I-P/S-SS-003

Please provide revised reports once the updates have been made. Let me know if you have any questions, thank you.

Zhur Lee
Project Coordinator
AMEC
Environment & Infrastructure
121 Innovation Drive, Suite 200, Irvine, CA 92617
Tel 949-642-0245 x1591, Fax 949-642-4474
zhur.lee@amec.com

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CHAIN-OF-CUSTODY RECORD

NB25743

PROJECT NAME: Former Pechiney Cast Plate Facility		DATE: 3-10-14	PAGE 1 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-03-0682
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky, Kevin Curnutt

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	EPA 6010/7471	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3-10-14	1043	591-IV-P/S-SS-001	X		4 oz glass jar	S			X		1	
2		1045	587-IV-P/S-SS-001	X			S			X		1	
3		1355	613-IB-P/S-SS-001	X	X		S			X		1	
4		1259	DC-397	X			O			X		1	
5		1304	DC-398	X			O			X		1	
6		1310	606-IIA-F/F-CS-001	X			O			X		1	
7		1317	607-IIA-F/F-CS-001	X			O			X		1	
8		1322	608-IIA-F/F-CS-001	X			O			X		1	
9		1335	576-IIA-P/S-CS-001	X			O			X		1	
10		1342	575-IIA-P/S-CS-001	X			O			X		1	
11		1349	570-IIA-P/S-SS-001	X			S			X		1	
12		1435	548-I-P/S-SS-024	X			S			X		1	
13		1436	548-I-P/S-SS-025	X			S			X		1	
14		1458	#904	X			S					1	
15	3/10/14	1459	#901	X		4 oz Jar	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	3/10/14	1530	SIGNATURE: [signature]	3/10/14	1530
PRINTED NAME: Kevin Curnutt			PRINTED NAME: Arthur Young		
COMPANY: AMEC			COMPANY: CALSCIENCE		
SIGNATURE: [signature]	3/10/14	1621	SIGNATURE: [signature]	3/10/14	1621
PRINTED NAME: Arthur Young			PRINTED NAME: Mary Soriano		
COMPANY: CALSCIENCE			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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CHAIN-OF-CUSTODY RECORD

NB 31280

PROJECT NAME: PECHANGY		DATE: 3/10/14	PAGE 2 OF 2
PROJECT NUMBER: 106270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		0682
TURNAROUND TIME: 48 Hr			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CUMMINS

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	3/10/14	1503	#902	X	4oz JAR	S			X		1	
17	↕	1504	#900	X	↑	S			X		1	
18	3/10/14	1506	#903	X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	3/10/14	1520	SIGNATURE: [signature]	3/10/14	1520
PRINTED NAME: KEN CUMMINS			PRINTED NAME: ARTHUR YONA		
COMPANY: AMEC			COMPANY: CALSCIENCE		
SIGNATURE: [signature]	3/10/14	1621	SIGNATURE: [signature]	3/10/14	1621
PRINTED NAME: ARTHUR YONA			PRINTED NAME: PEDRO SORIANO		
COMPANY: CALSCIENCE			COMPANY: CS		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 3

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-0682

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/10/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.3 °C - 0.3 °C (CF) = 2.0 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 806

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 806

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 15

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 806

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-0782

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/13/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-03-0782

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-0782 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/11/14. They were assigned to Work Order 14-03-0782.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0782
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	03/11/14 16:53
		Number of Containers:	11
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#910	14-03-0782-1	03/11/14 09:45	1	Solid
605-IIA-P/S-SS-001	14-03-0782-2	03/11/14 09:50	1	Solid
605-IIA-P/S-SS-002	14-03-0782-3	03/11/14 09:55	1	Solid
605-IIA-P/S-SS-003	14-03-0782-4	03/11/14 10:00	1	Solid
615-IV-P/S-O-001	14-03-0782-5	03/11/14 13:20	1	Other
562-IV-F/F-SS-010	14-03-0782-6	03/11/14 14:30	1	Solid
562-IV-F/F-SS-011	14-03-0782-7	03/11/14 14:35	1	Solid
615-IV-P/S-SS-001	14-03-0782-8	03/11/14 14:40	1	Solid
615-IV-P/S-SS-002	14-03-0782-9	03/11/14 14:45	1	Solid
615-IV-P/S-SS-003	14-03-0782-10	03/11/14 14:50	1	Solid
615-IV-P/S-SS-004	14-03-0782-11	03/11/14 14:55	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-0782
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/11/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#910 (14-03-0782-1)						
Arsenic	1.83		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	147		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.550		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.6		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	13.1		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	5.32		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.2		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.3		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	43.7		0.995	mg/kg	EPA 6010B	EPA 3050B
605-IIA-P/S-SS-001 (14-03-0782-2)						
Barium	115		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.497		0.246	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.546		0.493	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.2		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.5		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	32.0		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	27.7		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.6		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	22.5		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	312		0.985	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	1700		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	120		50	ug/kg	EPA 8082	EPA 3540C
605-IIA-P/S-SS-002 (14-03-0782-3)						
Arsenic	0.767		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	135		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.309		0.251	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.1		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.2		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	15.4		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	8.16		0.503	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.9		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	25.0		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	52.4		1.01	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-0782
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/11/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
605-IIA-P/S-SS-003 (14-03-0782-4)						
Barium	121		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	1.13		0.244	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.8		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.19		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	48.7		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	33.7		0.488	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.98		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	23.2		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	435		0.976	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	220		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-0782
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/11/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
615-IV-P/S-O-001 (14-03-0782-5)						
Arsenic	30.7		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	95.6		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.402		0.253	mg/kg	EPA 6010B	EPA 3050B
Cadmium	9.26		0.505	mg/kg	EPA 6010B	EPA 3050B
Chromium	101		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	962		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	1640		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.787		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.4		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	931		1.01	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0921		0.0820	mg/kg	EPA 7471A	EPA 7471A Total
C9-C10	6100		250	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	470		250	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	330		250	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	1300		250	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	4400		250	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	4300		250	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	2000		250	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	1200		250	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	950		250	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	1300		250	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	2700		250	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	4100		250	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	3400		250	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	32000		250	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	520		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	70		50	ug/kg	EPA 8082	EPA 3540C
615-IV-P/S-SS-002 (14-03-0782-9)						
C6-C44 Total	17		4.9	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-SS-002	**14-03-0782-3-A**	**03/11/14 09:55**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 14:42**	**140312B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	68	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-O-001	**14-03-0782-5-A**	**03/11/14 13:20**	**Other**	**GC 48**	**03/12/14**	**03/12/14 16:47**	**140312B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	250	49.5	
C7	ND	250	49.5	
C8	ND	250	49.5	
C9-C10	6100	250	49.5	
C11-C12	470	250	49.5	
C13-C14	330	250	49.5	
C15-C16	1300	250	49.5	
C17-C18	4400	250	49.5	
C19-C20	4300	250	49.5	
C21-C22	2000	250	49.5	
C23-C24	1200	250	49.5	
C25-C28	950	250	49.5	
C29-C32	1300	250	49.5	
C33-C36	2700	250	49.5	
C37-C40	4100	250	49.5	
C41-C44	3400	250	49.5	
C6-C44 Total	32000	250	49.5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-010	**14-03-0782-6-A**	**03/11/14 14:30**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 14:57**	**140312B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-011	**14-03-0782-7-A**	**03/11/14 14:35**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 15:13**	**140312B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	93	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-SS-001	**14-03-0782-8-A**	**03/11/14 14:40**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 15:28**	**140312B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-SS-002	**14-03-0782-9-A**	**03/11/14 14:45**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 15:44**	**140312B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	17	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-SS-003	**14-03-0782-10-A**	**03/11/14 14:50**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 16:00**	**140312B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	82	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-SS-004	**14-03-0782-11-A**	**03/11/14 14:55**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 16:15**	**140312B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	79	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-816**	**N/A**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 10:29**	**140312B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	68	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#910	**14-03-0782-1-A**	**03/11/14 09:45**	**Solid**	**ICP 7300**	**03/11/14**	**03/12/14 20:30**	**140311L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	1.83	0.746	0.995	
Barium	147	0.498	0.995	
Beryllium	0.550	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	17.1	0.249	0.995	
Cobalt	10.6	0.249	0.995	
Copper	13.1	0.498	0.995	
Lead	5.32	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	13.2	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	37.3	0.249	0.995	
Zinc	43.7	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-SS-001	**14-03-0782-2-A**	**03/11/14 09:50**	**Solid**	**ICP 7300**	**03/11/14**	**03/12/14 20:31**	**140311L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	ND	0.739	0.985	
Barium	115	0.493	0.985	
Beryllium	0.497	0.246	0.985	
Cadmium	0.546	0.493	0.985	
Chromium	11.2	0.246	0.985	
Cobalt	11.5	0.246	0.985	
Copper	32.0	0.493	0.985	
Lead	27.7	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	11.6	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	22.5	0.246	0.985	
Zinc	312	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-SS-002	**14-03-0782-3-A**	**03/11/14 09:55**	**Solid**	**ICP 7300**	**03/11/14**	**03/12/14 20:32**	**140311L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	0.767	0.754	1.01	
Barium	135	0.503	1.01	
Beryllium	0.309	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	14.1	0.251	1.01	
Cobalt	10.2	0.251	1.01	
Copper	15.4	0.503	1.01	
Lead	8.16	0.503	1.01	
Molybdenum	ND	0.251	1.01	
Nickel	10.9	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	25.0	0.251	1.01	
Zinc	52.4	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-SS-003	**14-03-0782-4-A**	**03/11/14 10:00**	**Solid**	**ICP 7300**	**03/11/14**	**03/12/14 20:33**	**140311L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.732	0.976	
Arsenic	ND	0.732	0.976	
Barium	121	0.488	0.976	
Beryllium	1.13	0.244	0.976	
Cadmium	ND	0.488	0.976	
Chromium	12.8	0.244	0.976	
Cobalt	9.19	0.244	0.976	
Copper	48.7	0.488	0.976	
Lead	33.7	0.488	0.976	
Molybdenum	ND	0.244	0.976	
Nickel	9.98	0.244	0.976	
Selenium	ND	0.732	0.976	
Silver	ND	0.244	0.976	
Thallium	ND	0.732	0.976	
Vanadium	23.2	0.244	0.976	
Zinc	435	0.976	0.976	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-O-001	**14-03-0782-5-A**	**03/11/14 13:20**	**Other**	**ICP 7300**	**03/11/14**	**03/12/14 20:37**	**140311L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	30.7	0.758	1.01	
Barium	95.6	0.505	1.01	
Beryllium	0.402	0.253	1.01	
Cadmium	9.26	0.505	1.01	
Chromium	101	0.253	1.01	
Cobalt	12.2	0.253	1.01	
Copper	962	0.505	1.01	
Lead	1640	0.505	1.01	
Molybdenum	0.787	0.253	1.01	
Nickel	13.4	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	28.2	0.253	1.01	
Zinc	931	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18127**	**N/A**	**Solid**	**ICP 7300**	**03/11/14**	**03/11/14 15:25**	**140311L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#910	**14-03-0782-1-A**	**03/11/14 09:45**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:47**	**140312L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

605-IIA-P/S-SS-001	**14-03-0782-2-A**	**03/11/14 09:50**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:54**	**140312L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

605-IIA-P/S-SS-002	**14-03-0782-3-A**	**03/11/14 09:55**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:56**	**140312L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0769	1.00	

605-IIA-P/S-SS-003	**14-03-0782-4-A**	**03/11/14 10:00**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:59**	**140312L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

615-IV-P/S-O-001	**14-03-0782-5-A**	**03/11/14 13:20**	**Other**	**Mercury**	**03/12/14**	**03/12/14 12:01**	**140312L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0921	0.0820	1.00	

Method Blank	**099-16-272-84**	**N/A**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:43**	**140312L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#910	**14-03-0782-1-A**	**03/11/14 09:45**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 22:11**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

605-IIA-P/S-SS-001	**14-03-0782-2-A**	**03/11/14 09:50**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 22:30**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	120	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-SS-001	**14-03-0782-2-A**	**03/11/14 09:50**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 11:52**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1700	500	9.96	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	64	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-SS-002	**14-03-0782-3-A**	**03/11/14 09:55**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 22:49**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
605-IIA-P/S-SS-003	**14-03-0782-4-A**	**03/11/14 10:00**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 23:08**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	220	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

615-IV-P/S-O-001	**14-03-0782-5-A**	**03/11/14 13:20**	**Other**	**GC 31**	**03/11/14**	**03/13/14 11:33**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	520	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	70	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
562-IV-F/F-SS-010	**14-03-0782-6-A**	**03/11/14 14:30**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 23:46**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

562-IV-F/F-SS-011	**14-03-0782-7-A**	**03/11/14 14:35**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 00:05**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-SS-001	**14-03-0782-8-A**	**03/11/14 14:40**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 00:24**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	ND	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

615-IV-P/S-SS-002	**14-03-0782-9-A**	**03/11/14 14:45**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 00:43**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-SS-003	**14-03-0782-10-A**	**03/11/14 14:50**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 01:02**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

615-IV-P/S-SS-004	**14-03-0782-11-A**	**03/11/14 14:55**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 01:21**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-211**	**N/A**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 21:13**	**140311L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0751-1	**Sample**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 11:32**	**140312S01**
14-03-0751-1	**Matrix Spike**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 11:01**	**140312S01**
14-03-0751-1	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 11:16**	**140312S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	358.8	90	367.5	92	64-130	2	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-02-0420-11	**Sample**	**Solid**	**ICP 7300**	**03/11/14**	**03/11/14 15:29**	**140311S01**
14-02-0420-11	**Matrix Spike**	**Solid**	**ICP 7300**	**03/11/14**	**03/11/14 15:30**	**140311S01**
14-02-0420-11	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/11/14**	**03/11/14 15:31**	**140311S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	2.415	10	3.820	15	50-115	45	0-20	3,4
Arsenic	6.007	25.00	31.85	103	32.27	105	75-125	1	0-20	
Barium	215.9	25.00	191.3	4X	184.1	4X	75-125	4X	0-20	Q
Beryllium	0.3167	25.00	25.79	102	26.11	103	75-125	1	0-20	
Cadmium	ND	25.00	23.80	95	24.07	96	75-125	1	0-20	
Chromium	33.44	25.00	60.33	108	61.33	112	75-125	2	0-20	
Cobalt	16.14	25.00	41.65	102	41.26	100	75-125	1	0-20	
Copper	149.1	25.00	87.05	4X	85.01	4X	75-125	4X	0-20	Q
Lead	3.353	25.00	27.11	95	28.04	99	75-125	3	0-20	
Molybdenum	1.802	25.00	21.73	80	22.45	83	75-125	3	0-20	
Nickel	25.03	25.00	50.58	102	52.28	109	75-125	3	0-20	
Selenium	ND	25.00	18.19	73	18.83	75	75-125	3	0-20	3
Silver	ND	12.50	13.41	107	13.53	108	75-125	1	0-20	
Thallium	ND	25.00	23.06	92	24.13	97	75-125	5	0-20	
Vanadium	71.76	25.00	102.3	122	100.5	115	75-125	2	0-20	
Zinc	291.0	25.00	192.5	4X	256.0	4X	75-125	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#910	**Sample**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:47**	**140312S01**
#910	**Matrix Spike**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:50**	**140312S01**
#910	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:52**	**140312S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7899	95	0.7486	90	71-137	5	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
615-IV-P/S-SS-004	**Sample**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 01:21**	**140311S19**
615-IV-P/S-SS-004	**Matrix Spike**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 21:32**	**140311S19**
615-IV-P/S-SS-004	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 21:52**	**140311S19**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	78.18	78	85.25	85	50-135	9	0-25	
Aroclor-1260	ND	100.0	77.59	78	83.28	83	50-135	7	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-816	**LCS**	**Solid**	**GC 48**	**03/12/14**	**03/12/14 10:45**	**140312B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	329.7	82	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18127	**LCS**	**Solid**	**ICP 7300**	**03/11/14**	**03/11/14 15:27**	**140311L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	23.76	95	80-120	73-127	
Arsenic	25.00	24.37	97	80-120	73-127	
Barium	25.00	25.40	102	80-120	73-127	
Beryllium	25.00	24.35	97	80-120	73-127	
Cadmium	25.00	25.50	102	80-120	73-127	
Chromium	25.00	27.08	108	80-120	73-127	
Cobalt	25.00	27.66	111	80-120	73-127	
Copper	25.00	26.37	105	80-120	73-127	
Lead	25.00	25.92	104	80-120	73-127	
Molybdenum	25.00	25.31	101	80-120	73-127	
Nickel	25.00	26.70	107	80-120	73-127	
Selenium	25.00	23.57	94	80-120	73-127	
Silver	12.50	13.43	107	80-120	73-127	
Thallium	25.00	27.75	111	80-120	73-127	
Vanadium	25.00	24.39	98	80-120	73-127	
Zinc	25.00	25.40	102	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-84	**LCS**	**Solid**	**Mercury**	**03/12/14**	**03/12/14 11:45**	**140312L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8351	100	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/11/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0782
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-211	**LCS**	**Solid**	**GC 31**	**03/11/14**	**03/12/14 20:54**	**140311L19**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	80.22	80	50-135	
Aroclor-1260	100.0	79.04	79	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-0782

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-0782

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31283

PROJECT NAME: PECHINEY

DATE: 03/11/14 PAGE 1 OF 1

PROJECT NUMBER: 10627 0030

RESULTS TO: LINDA CONLAN

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: COURIER

LABORATORY NAME: CAL SCIENCE

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC IRVINE

REPORTING REQUIREMENTS: 14-03-0782

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Ken Curnutt

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	TITLE 22 METALS	8015 TPH	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/11/14	0945	#910	X	X		4oz JAR	S			X		1	
2		0950	605-IIA-P/S-SS-001	X	X			S			X		1	
3		0955	605-IIA-P/S-SS-002	X	X	X		S			X		1	
4		1000	605-IIA-P/S-SS-003	X	X			S			X		1	
5		1320	615-II-P/S-O-001	X	X	X		O			X		1	
6		1430	562-IV-F/F-SS-010	X		X		S			X		1	
7		1435	562-IV-F/F-SS-011	X		X		S			X		1	
8		1440	615-IV-P/S-SS-001	X		X		S			X		1	
9		1445	615-IV-P/S-SS-002	X		X		S			X		1	
10		1450	615-IV-P/S-SS-003	X		X		S			X		1	
11	3/11/14	1455	615-IV-P/S-SS-004	X		X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	3/11/14	1535	SIGNATURE:	3/11/14	1535
PRINTED NAME: Ken Curnutt			PRINTED NAME: Arthur Young		
COMPANY: AMEC			COMPANY: CALSCIENCE		
SIGNATURE:	3/11/14	1653	SIGNATURE:	3/11/14	1653
PRINTED NAME: Arthur Young			PRINTED NAME: J. PAMEL		
COMPANY: CALSCIENCE			COMPANY: CSL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-0 7 6 2

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/11/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.0 °C - 0.3 °C (CF) = 1.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 603

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 603

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 603

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-0898

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/17/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-03-0898

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-0898 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/12/14. They were assigned to Work Order 14-03-0898.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-0898
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	03/12/14 17:50
		Number of Containers:	6
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
616-IIB-C/S-CS-001	14-03-0898-1	03/12/14 09:51	1	Other
616-IIB-C/S-CS-002	14-03-0898-2	03/12/14 09:55	1	Other
DC-399	14-03-0898-3	03/12/14 10:07	1	Other
#918	14-03-0898-4	03/12/14 10:15	1	Solid
615-IV-P/S-CS-001	14-03-0898-5	03/12/14 11:15	1	Other
#919	14-03-0898-6	03/12/14 13:50	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-0898
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/12/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
616-IIB-C/S-CS-001 (14-03-0898-1)						
C25-C28	5.8		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	12		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	13		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	13		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	5.6		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	58		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	210		50	ug/kg	EPA 8082	EPA 3540C
DC-399 (14-03-0898-3)						
Aroclor-1248	11000		990	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1700		990	ug/kg	EPA 8082	EPA 3540C
#918 (14-03-0898-4)						
Arsenic	1.62		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	94.2		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.288		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.2		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.46		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	66.8		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	11.3		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.41		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	24.7		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	62.8		0.990	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	210		50	ug/kg	EPA 8082	EPA 3540C
615-IV-P/S-CS-001 (14-03-0898-5)						
Aroclor-1248	140		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-0898
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/12/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#919 (14-03-0898-6)						
Arsenic	0.948		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	116		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.317		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.2		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.4		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	14.7		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	4.22		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.7		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.9		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	56.0		0.995	mg/kg	EPA 6010B	EPA 3050B
C13-C14	7.9		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	5.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	6.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	7.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	83		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	540		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	73		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
616-IIB-C/S-CS-001	**14-03-0898-1-A**	**03/12/14 09:51**	**Other**	**GC 46**	**03/12/14**	**03/13/14 01:44**	**140312B16**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	5.8	4.9	0.980	
C29-C32	12	4.9	0.980	
C33-C36	13	4.9	0.980	
C37-C40	13	4.9	0.980	
C41-C44	5.6	4.9	0.980	
C6-C44 Total	58	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#919	**14-03-0898-6-A**	**03/12/14 13:50**	**Solid**	**GC 46**	**03/12/14**	**03/13/14 02:02**	**140312B16**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	7.9	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	5.5	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	6.0	5.0	1.00	
C29-C32	14	5.0	1.00	
C33-C36	12	5.0	1.00	
C37-C40	13	5.0	1.00	
C41-C44	7.7	5.0	1.00	
C6-C44 Total	83	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-818**	**N/A**	**Solid**	**GC 46**	**03/12/14**	**03/12/14 19:38**	**140312B16**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#918	**14-03-0898-4-A**	**03/12/14 10:15**	**Solid**	**ICP 7300**	**03/13/14**	**03/14/14 13:08**	**140313L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	1.62	0.743	0.990	
Barium	94.2	0.495	0.990	
Beryllium	0.288	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	12.2	0.248	0.990	
Cobalt	8.46	0.248	0.990	
Copper	66.8	0.495	0.990	
Lead	11.3	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	9.41	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	24.7	0.248	0.990	
Zinc	62.8	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#919	**14-03-0898-6-A**	**03/12/14 13:50**	**Solid**	**ICP 7300**	**03/13/14**	**03/14/14 13:09**	**140313L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	0.948	0.746	0.995	
Barium	116	0.498	0.995	
Beryllium	0.317	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	14.2	0.249	0.995	
Cobalt	10.4	0.249	0.995	
Copper	14.7	0.498	0.995	
Lead	4.22	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	10.7	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	29.9	0.249	0.995	
Zinc	56.0	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18145**	**N/A**	**Solid**	**ICP 7300**	**03/13/14**	**03/14/14 14:02**	**140313L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#918	**14-03-0898-4-A**	**03/12/14 10:15**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 18:31**	**140313L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#919	**14-03-0898-6-A**	**03/12/14 13:50**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 18:33**	**140313L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0758	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-87**	**N/A**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 17:48**	**140313L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
616-IIB-C/S-CS-001	**14-03-0898-1-A**	**03/12/14 09:51**	**Other**	**GC 31**	**03/12/14**	**03/13/14 23:18**	**140312L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	210	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

616-IIB-C/S-CS-002	**14-03-0898-2-A**	**03/12/14 09:55**	**Other**	**GC 31**	**03/12/14**	**03/13/14 23:37**	**140312L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-399	**14-03-0898-3-A**	**03/12/14 10:07**	**Other**	**GC 31**	**03/12/14**	**03/14/14 12:37**	**140312L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	990	20.0	
Aroclor-1221	ND	990	20.0	
Aroclor-1232	ND	990	20.0	
Aroclor-1242	ND	990	20.0	
Aroclor-1248	11000	990	20.0	
Aroclor-1254	ND	990	20.0	
Aroclor-1260	1700	990	20.0	
Aroclor-1262	ND	990	20.0	
Aroclor-1268	ND	990	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	60-125	
2,4,5,6-Tetrachloro-m-Xylene	74	50-130	

#918	**14-03-0898-4-A**	**03/12/14 10:15**	**Solid**	**GC 31**	**03/12/14**	**03/14/14 00:16**	**140312L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	210	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	82	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
615-IV-P/S-CS-001	**14-03-0898-5-A**	**03/12/14 11:15**	**Other**	**GC 31**	**03/12/14**	**03/14/14 12:56**	**140312L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	0.996	
Aroclor-1221	ND	50	0.996	
Aroclor-1232	ND	50	0.996	
Aroclor-1242	ND	50	0.996	
Aroclor-1248	140	50	0.996	
Aroclor-1254	ND	50	0.996	
Aroclor-1260	ND	50	0.996	
Aroclor-1262	ND	50	0.996	
Aroclor-1268	ND	50	0.996	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	75	50-130	

#919	**14-03-0898-6-A**	**03/12/14 13:50**	**Solid**	**GC 31**	**03/12/14**	**03/14/14 01:32**	**140312L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	540	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	73	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-212**	**N/A**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 22:21**	**140312L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	75	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0852-4	**Sample**	**Solid**	**GC 46**	**03/12/14**	**03/12/14 21:23**	**140312S16**
14-03-0852-4	**Matrix Spike**	**Solid**	**GC 46**	**03/12/14**	**03/12/14 20:14**	**140312S16**
14-03-0852-4	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**03/12/14**	**03/12/14 20:32**	**140312S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	339.5	85	330.9	83	64-130	3	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0880-5	**Sample**	**Solid**	**ICP 7300**	**03/13/14**	**03/13/14 20:19**	**140313S02**
14-03-0880-5	**Matrix Spike**	**Solid**	**ICP 7300**	**03/13/14**	**03/13/14 20:20**	**140313S02**
14-03-0880-5	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/13/14**	**03/13/14 20:21**	**140313S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	1.723	7	1.791	7	50-115	4	0-20	3
Arsenic	3.034	25.00	27.39	97	26.87	95	75-125	2	0-20	
Barium	106.4	25.00	156.1	4X	146.8	4X	75-125	4X	0-20	Q
Beryllium	0.3707	25.00	26.15	103	26.61	105	75-125	2	0-20	
Cadmium	ND	25.00	25.32	101	25.88	104	75-125	2	0-20	
Chromium	14.49	25.00	44.07	118	41.23	107	75-125	7	0-20	
Cobalt	7.542	25.00	34.86	109	34.23	107	75-125	2	0-20	
Copper	26.16	25.00	44.53	73	42.38	65	75-125	5	0-20	3
Lead	20.48	25.00	54.81	137	46.52	104	75-125	16	0-20	3
Molybdenum	ND	25.00	21.01	84	21.93	88	75-125	4	0-20	
Nickel	11.64	25.00	38.08	106	36.99	101	75-125	3	0-20	
Selenium	ND	25.00	22.97	92	22.72	91	75-125	1	0-20	
Silver	ND	12.50	13.31	106	13.68	109	75-125	3	0-20	
Thallium	ND	25.00	22.21	89	23.55	94	75-125	6	0-20	
Vanadium	29.47	25.00	58.93	118	55.23	103	75-125	6	0-20	
Zinc	60.28	25.00	98.84	154	84.40	96	75-125	16	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0880-1	**Sample**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 17:53**	**140313S05**
14-03-0880-1	**Matrix Spike**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 18:09**	**140313S05**
14-03-0880-1	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 18:11**	**140313S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8804	105	0.8979	108	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0880-5	**Sample**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 18:06**	**140313S05**
14-03-0880-5	**Matrix Spike**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 18:09**	**140313S05**
14-03-0880-5	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 18:11**	**140313S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8804	105	0.8979	108	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#918	**Sample**	**Solid**	**GC 31**	**03/12/14**	**03/14/14 00:16**	**140312S14**
#918	**Matrix Spike**	**Solid**	**GC 31**	**03/12/14**	**03/13/14 22:40**	**140312S14**
#918	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/12/14**	**03/13/14 22:59**	**140312S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	196.8	197	198.7	199	50-135	1	0-25	3
Aroclor-1260	ND	100.0	141.8	142	130.8	131	50-135	8	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-818	**LCS**	**Solid**	**GC 46**	**03/12/14**	**03/12/14 19:56**	**140312B16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	379.3	95	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18145	**LCS**	**Solid**	**ICP 7300**	**03/13/14**	**03/14/14 14:04**	**140313L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	23.33	93	80-120	73-127	
Arsenic	25.00	25.63	103	80-120	73-127	
Barium	25.00	25.62	102	80-120	73-127	
Beryllium	25.00	24.42	98	80-120	73-127	
Cadmium	25.00	25.44	102	80-120	73-127	
Chromium	25.00	25.53	102	80-120	73-127	
Cobalt	25.00	27.96	112	80-120	73-127	
Copper	25.00	26.06	104	80-120	73-127	
Lead	25.00	25.40	102	80-120	73-127	
Molybdenum	25.00	25.31	101	80-120	73-127	
Nickel	25.00	26.91	108	80-120	73-127	
Selenium	25.00	24.49	98	80-120	73-127	
Silver	12.50	13.30	106	80-120	73-127	
Thallium	25.00	27.82	111	80-120	73-127	
Vanadium	25.00	24.52	98	80-120	73-127	
Zinc	25.00	26.81	107	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-87	**LCS**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 17:51**	**140313L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8113	97	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/12/14
121 Innovation Drive, Suite 200		Work Order:	14-03-0898
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-212	**LCS**	**Solid**	**GC 31**	**03/11/14**	**03/13/14 22:02**	**140312L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	85.28	85	50-135	
Aroclor-1260	100.0	92.58	93	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-0898

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-0898

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31282

PROJECT NAME: PECHINEY			DATE: 3/12/14 PAGE 1 OF 1
PROJECT NUMBER: 106270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS: 14-03-0898
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:	IRVINE	
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEV CURNUTT, Kimberly Chomiuky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	TITLE 22 METALS	8015 TPH	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/12/14	0951	6016-IIB-C/S-CS-001	X		X	4oz JAR	O			X		1	
2		0955	6016-IIB-C/S-CS-002	X				O			X		1	
3		1007	DC-399	X				O			X		1	
4		1015	#918	X	X			S			X		1	
5		1115	615-IV-C/S-CS-001	X				O			X		1	
6		1350	#919	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [illegible] PRINTED NAME: Kev Curnutt COMPANY: AMEC	03/12/14	1400	SIGNATURE: [illegible] PRINTED NAME: [illegible] COMPANY: AMEC	3/12/14	1400
SIGNATURE: [illegible] PRINTED NAME: [illegible] COMPANY: AMEC	3/12/14	1505	SIGNATURE: [illegible] PRINTED NAME: DENNY IRAWAN COMPANY: CEL	03/12/14	15.05
SIGNATURE: [illegible] PRINTED NAME: DENNY IRAWAN COMPANY: CEL	03/12/14	1750	SIGNATURE: PRINTED NAME: COMPANY:	3/12/14	1750

TOTAL NUMBER OF CONTAINERS: 6

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-0898

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/12/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.9 °C - 0.3 °C (CF) = 2.6 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 846

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 846

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 802

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-1005

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/17/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-03-1005

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-1005 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/13/14. They were assigned to Work Order 14-03-1005.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-1005
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	03/13/14 17:23
		Number of Containers:	8
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
617-IIB-P/S-SS-001	14-03-1005-1	03/13/14 08:51	1	Solid
617-IIB-P/S-CS-001	14-03-1005-2	03/13/14 09:56	1	Other
617-IIB-P/S-CS-002	14-03-1005-3	03/13/14 10:09	1	Other
617-IIB-P/S-CS-003	14-03-1005-4	03/13/14 13:00	1	Other
DC-400	14-03-1005-5	03/13/14 13:02	1	Other
617-IIB-P/S-CS-004	14-03-1005-6	03/13/14 13:04	1	Other
576-IV-P/S-SS-001	14-03-1005-7	03/13/14 13:10	1	Solid
613-IIB-P/S-SS-002	14-03-1005-8	03/13/14 13:20	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1005
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/13/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
617-IIB-P/S-SS-001 (14-03-1005-1)						
Arsenic	1.87		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	87.9		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	1.50		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	98.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.50		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	1190		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	24.9		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	24.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	3470		1.00	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	8300		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1400		500	ug/kg	EPA 8082	EPA 3540C
617-IIB-P/S-CS-003 (14-03-1005-4)						
Arsenic	4.68		0.732	mg/kg	EPA 6010B	EPA 3050B
Barium	135		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.546		0.244	mg/kg	EPA 6010B	EPA 3050B
Chromium	40.4		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.15		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	292		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	6.96		0.488	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.831		0.244	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.78		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	23.2		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	929		0.976	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	940		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	140		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1005
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/13/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
DC-400 (14-03-1005-5)						
Arsenic	28.6		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	50.8		0.505	mg/kg	EPA 6010B	EPA 3050B
Chromium	458		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	27.6		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	873		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	26.7		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	202		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	1950		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	1.85		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	88.7		1.01	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	870		49	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	250		49	ug/kg	EPA 8082	EPA 3540C
617-IIB-P/S-CS-004 (14-03-1005-6)						
Aroclor-1248	63		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
617-IIB-P/S-SS-001	**14-03-1005-1-A**	**03/13/14 08:51**	**Solid**	**ICP 7300**	**03/14/14**	**03/14/14 18:30**	**140314L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.87	0.750	1.00	
Barium	87.9	0.500	1.00	
Beryllium	1.50	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	98.5	0.250	1.00	
Cobalt	6.50	0.250	1.00	
Copper	1190	0.500	1.00	
Lead	24.9	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	12.6	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	24.0	0.250	1.00	
Zinc	3470	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
617-IIB-P/S-CS-003	**14-03-1005-4-A**	**03/13/14 13:00**	**Other**	**ICP 7300**	**03/14/14**	**03/14/14 18:31**	**140314L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.732	0.976	
Arsenic	4.68	0.732	0.976	
Barium	135	0.488	0.976	
Beryllium	0.546	0.244	0.976	
Cadmium	ND	0.488	0.976	
Chromium	40.4	0.244	0.976	
Cobalt	7.15	0.244	0.976	
Copper	292	0.488	0.976	
Lead	6.96	0.488	0.976	
Molybdenum	0.831	0.244	0.976	
Nickel	8.78	0.244	0.976	
Selenium	ND	0.732	0.976	
Silver	ND	0.244	0.976	
Thallium	ND	0.732	0.976	
Vanadium	23.2	0.244	0.976	
Zinc	929	0.976	0.976	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-400	**14-03-1005-5-A**	**03/13/14 13:02**	**Other**	**ICP 7300**	**03/14/14**	**03/14/14 18:32**	**140314L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	28.6	0.758	1.01	
Barium	50.8	0.505	1.01	
Beryllium	ND	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	458	0.253	1.01	
Cobalt	27.6	0.253	1.01	
Copper	873	0.505	1.01	
Lead	26.7	0.505	1.01	
Molybdenum	202	0.253	1.01	
Nickel	1950	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	1.85	0.253	1.01	
Zinc	88.7	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18147**	**N/A**	**Solid**	**ICP 7300**	**03/14/14**	**03/14/14 18:09**	**140314L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
617-IIB-P/S-SS-001	**14-03-1005-1-A**	**03/13/14 08:51**	**Solid**	**Mercury**	**03/13/14**	**03/14/14 10:56**	**140313L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0769	1.00	

617-IIB-P/S-CS-003	**14-03-1005-4-A**	**03/13/14 13:00**	**Other**	**Mercury**	**03/13/14**	**03/14/14 10:58**	**140313L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

DC-400	**14-03-1005-5-A**	**03/13/14 13:02**	**Other**	**Mercury**	**03/13/14**	**03/14/14 11:17**	**140313L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Method Blank	**099-16-272-86**	**N/A**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 11:18**	**140313L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
617-IIB-P/S-SS-001	**14-03-1005-1-A**	**03/13/14 08:51**	**Solid**	**GC 31**	**03/13/14**	**03/17/14 13:07**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	8300	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	1400	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

617-IIB-P/S-CS-001	**14-03-1005-2-A**	**03/13/14 09:56**	**Other**	**GC 31**	**03/13/14**	**03/15/14 04:14**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	77	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
617-IIB-P/S-CS-002	**14-03-1005-3-A**	**03/13/14 10:09**	**Other**	**GC 31**	**03/13/14**	**03/15/14 04:33**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	75	50-130	

617-IIB-P/S-CS-003	**14-03-1005-4-A**	**03/13/14 13:00**	**Other**	**GC 31**	**03/13/14**	**03/15/14 04:52**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	940	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	140	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	76	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-400	**14-03-1005-5-A**	**03/13/14 13:02**	**Other**	**GC 31**	**03/13/14**	**03/15/14 05:11**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	870	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	250	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	74	50-130	

617-IIB-P/S-CS-004	**14-03-1005-6-A**	**03/13/14 13:04**	**Other**	**GC 31**	**03/13/14**	**03/15/14 05:30**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	63	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	77	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
576-IV-P/S-SS-001	**14-03-1005-7-A**	**03/13/14 13:10**	**Solid**	**GC 31**	**03/13/14**	**03/15/14 05:50**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	76	50-130	

613-IIB-P/S-SS-002	**14-03-1005-8-A**	**03/13/14 13:20**	**Solid**	**GC 31**	**03/13/14**	**03/15/14 06:09**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-213**	**N/A**	**Solid**	**GC 31**	**03/13/14**	**03/15/14 02:58**	**140313L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	75	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0812-2	**Sample**	**Solid**	**ICP 7300**	**03/14/14**	**03/14/14 18:17**	**140314S01**
14-03-0812-2	**Matrix Spike**	**Solid**	**ICP 7300**	**03/14/14**	**03/14/14 18:18**	**140314S01**
14-03-0812-2	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/14/14**	**03/14/14 18:19**	**140314S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	1.916	8	2.137	9	50-115	11	0-20	3
Arsenic	1.620	25.00	26.89	101	27.12	102	75-125	1	0-20	
Barium	134.6	25.00	176.4	4X	171.1	4X	75-125	4X	0-20	Q
Beryllium	0.2610	25.00	26.47	105	26.16	104	75-125	1	0-20	
Cadmium	ND	25.00	24.30	97	24.54	98	75-125	1	0-20	
Chromium	70.14	25.00	97.40	109	96.71	106	75-125	1	0-20	
Cobalt	17.59	25.00	47.06	118	44.09	106	75-125	7	0-20	
Copper	26.36	25.00	55.74	118	54.84	114	75-125	2	0-20	
Lead	1.389	25.00	26.18	99	26.31	100	75-125	0	0-20	
Molybdenum	ND	25.00	22.51	90	22.60	90	75-125	0	0-20	
Nickel	52.51	25.00	87.43	140	80.72	113	75-125	8	0-20	3
Selenium	ND	25.00	21.71	87	22.24	89	75-125	2	0-20	
Silver	ND	12.50	13.47	108	13.45	108	75-125	0	0-20	
Thallium	ND	25.00	22.59	90	22.71	91	75-125	1	0-20	
Vanadium	83.10	25.00	111.9	115	108.9	103	75-125	3	0-20	
Zinc	47.39	25.00	71.77	98	72.95	102	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-0840-25	**Sample**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 11:23**	**140313S01**
14-03-0840-25	**Matrix Spike**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 11:25**	**140313S01**
14-03-0840-25	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 11:27**	**140313S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7568	91	0.7821	94	71-137	3	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
613-IIB-P/S-SS-002	**Sample**	**Solid**	**GC 31**	**03/13/14**	**03/15/14 06:09**	**140313S10**
613-IIB-P/S-SS-002	**Matrix Spike**	**Solid**	**GC 31**	**03/13/14**	**03/15/14 03:17**	**140313S10**
613-IIB-P/S-SS-002	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/13/14**	**03/15/14 03:36**	**140313S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	87.68	88	82.56	83	50-135	6	0-25	
Aroclor-1260	ND	100.0	103.1	103	100.9	101	50-135	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18147	**LCS**	**Solid**	**ICP 7300**	**03/14/14**	**03/14/14 18:13**	**140314L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	22.46	90	80-120	73-127	
Arsenic	25.00	24.28	97	80-120	73-127	
Barium	25.00	24.89	100	80-120	73-127	
Beryllium	25.00	23.68	95	80-120	73-127	
Cadmium	25.00	24.86	99	80-120	73-127	
Chromium	25.00	24.74	99	80-120	73-127	
Cobalt	25.00	27.34	109	80-120	73-127	
Copper	25.00	26.16	105	80-120	73-127	
Lead	25.00	25.38	102	80-120	73-127	
Molybdenum	25.00	24.80	99	80-120	73-127	
Nickel	25.00	25.78	103	80-120	73-127	
Selenium	25.00	22.86	91	80-120	73-127	
Silver	12.50	13.05	104	80-120	73-127	
Thallium	25.00	27.29	109	80-120	73-127	
Vanadium	25.00	23.95	96	80-120	73-127	
Zinc	25.00	26.32	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-86	**LCS**	**Solid**	**Mercury**	**03/13/14**	**03/13/14 11:21**	**140313L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8262	99	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/13/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1005
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-213	**LCS**	**Solid**	**GC 31**	**03/13/14**	**03/15/14 02:39**	**140313L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	78.98	79	50-135	
Aroclor-1260	100.0	91.32	91	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-1005

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	469	Mercury	1
EPA 8082	EPA 3540C	669	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-03-1005

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25746

PROJECT NAME: PECHINEY		DATE: 3/13/14	PAGE 1 OF 1
PROJECT NUMBER: 10 6270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 14-03-1005
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/13/14	0851	617-11B-P/S-SS-001	X	X	4oz JAR	S			X		1	
2		0956	617-IIB-P/S-CS-001	X			O			X		1	
3		1009	617-IIB-P/S-CS-002	X			O			X		1	
4		1300	617-IIB-P/S-CS-003	X	X		O			X		1	
5		1302	DC-400	X	X		O			X		1	
6		1304	617-IIB-P/S-CS-004	X			O			X		1	
7		1310	576-1V-P/S-SS-001	X			S			X		1	
8	3/13/14	1320	613-IIB-P/S-SS-002	X			S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: KEN CURNUTT COMPANY: AMEC	3/13/14	1400	SIGNATURE: [signature] PRINTED NAME: STEPHEN HUANG COMPANY: AMEC	3/13/14	1400
SIGNATURE: [signature] PRINTED NAME: STEPHEN HUANG COMPANY: AMEC	3/13/14	1500	SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	3/13/14	1500
SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	3/13/14	1723	SIGNATURE: [signature] PRINTED NAME: Yan Liao COMPANY: CEL	3/13/14	1723

TOTAL NUMBER OF CONTAINERS: 8

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-1005

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/13/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 603

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 663

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 300

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 300

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

The original report has been revised/corrected.

CALSCIENCE

WORK ORDER NUMBER: 14-03-1476

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/26/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-03-1476

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-1476 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/20/14. They were assigned to Work Order 14-03-1476.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-1476
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	03/20/14 18:04
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#923	14-03-1476-1	03/20/14 10:07	1	Solid
#922-2	14-03-1476-2	03/20/14 10:07	1	Solid
#922	14-03-1476-3	03/20/14 10:08	1	Solid
#924	14-03-1476-4	03/20/14 10:11	1	Solid
#923-2	14-03-1476-5	03/20/14 10:12	1	Solid
#924-2	14-03-1476-6	03/20/14 10:17	1	Solid
#927	14-03-1476-7	03/20/14 10:21	1	Solid
#927-2	14-03-1476-8	03/20/14 10:23	1	Solid
#926	14-03-1476-9	03/20/14 10:26	1	Solid
#926-2	14-03-1476-10	03/20/14 10:28	1	Solid
#925	14-03-1476-11	03/20/14 10:31	1	Solid
#925-2	14-03-1476-12	03/20/14 10:35	1	Solid
644-IIB-P/S-CS-001	14-03-1476-13	03/20/14 10:43	1	Other
644-IIB-P/S-O-001	14-03-1476-14	03/20/14 10:45	1	Other
DC-414	14-03-1476-15	03/20/14 11:02	1	Other
644-IIB-P/S-SS-001	14-03-1476-16	03/20/14 13:15	1	Solid
644-IIB-P/S-SS-002	14-03-1476-17	03/20/14 13:16	1	Solid
644-IIB-P/S-SS-003	14-03-1476-18	03/20/14 13:17	1	Solid
644-IIB-P/S-SS-004	14-03-1476-19	03/20/14 13:18	1	Solid
644-IIB-P/S-SS-005	14-03-1476-20	03/20/14 13:20	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1476
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/20/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#923 (14-03-1476-1)						
Aroclor-1248	4500000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	430000		50000	ug/kg	EPA 8082	EPA 3540C
#922-2 (14-03-1476-2)						
Aroclor-1248	4900		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	120		50	ug/kg	EPA 8082	EPA 3540C
#922 (14-03-1476-3)						
Aroclor-1248	270000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	20000		5000	ug/kg	EPA 8082	EPA 3540C
#924 (14-03-1476-4)						
Aroclor-1248	1500000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	130000		50000	ug/kg	EPA 8082	EPA 3540C
#923-2 (14-03-1476-5)						
Aroclor-1248	140000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	7900		5000	ug/kg	EPA 8082	EPA 3540C
#924-2 (14-03-1476-6)						
Aroclor-1248	280000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	15000		5000	ug/kg	EPA 8082	EPA 3540C
#927 (14-03-1476-7)						
Aroclor-1248	78000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	6800		5000	ug/kg	EPA 8082	EPA 3540C
#927-2 (14-03-1476-8)						
Aroclor-1248	190000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	13000		5000	ug/kg	EPA 8082	EPA 3540C
#926 (14-03-1476-9)						
Aroclor-1248	92000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	7700		5000	ug/kg	EPA 8082	EPA 3540C
#926-2 (14-03-1476-10)						
Aroclor-1248	55000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	5300		5000	ug/kg	EPA 8082	EPA 3540C
#925 (14-03-1476-11)						
Aroclor-1248	1300000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	67000		50000	ug/kg	EPA 8082	EPA 3540C
#925-2 (14-03-1476-12)						
Aroclor-1248	490000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	25000		5000	ug/kg	EPA 8082	EPA 3540C
644-IIB-P/S-CS-001 (14-03-1476-13)						
Aroclor-1248	4400000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	99000		50000	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-03-1476 Pechiney / 106270030 03/20/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
644-IIB-P/S-O-001 (14-03-1476-14)						
Aroclor-1248	380000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	20000		5000	ug/kg	EPA 8082	EPA 3540C
DC-414 (14-03-1476-15)						
Aroclor-1248	1100000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	63000		50000	ug/kg	EPA 8082	EPA 3540C
644-IIB-P/S-SS-001 (14-03-1476-16)						
Aroclor-1248	4000000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	290000		50000	ug/kg	EPA 8082	EPA 3540C
644-IIB-P/S-SS-002 (14-03-1476-17)						
Aroclor-1248	4400000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	310000		50000	ug/kg	EPA 8082	EPA 3540C
644-IIB-P/S-SS-003 (14-03-1476-18)						
Aroclor-1248	180000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	33000		5000	ug/kg	EPA 8082	EPA 3540C
644-IIB-P/S-SS-004 (14-03-1476-19)						
Aroclor-1248	6500000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	300000		50000	ug/kg	EPA 8082	EPA 3540C
644-IIB-P/S-SS-005 (14-03-1476-20)						
Aroclor-1248	26000000		5000000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1600000		500000	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#923	**14-03-1476-1-A**	**03/20/14 10:07**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 11:44**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	430000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	8320	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#923	**14-03-1476-1-A**	**03/20/14 10:07**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 11:25**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4500000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	7000	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#922-2	**14-03-1476-2-A**	**03/20/14 10:07**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 12:31**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	120	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#922-2	**14-03-1476-2-A**	**03/20/14 10:07**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 11:05**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4900	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#922	**14-03-1476-3-A**	**03/20/14 10:08**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 07:46**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	20000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#922	**14-03-1476-3-A**	**03/20/14 10:08**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 12:03**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	270000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	70	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#924	**14-03-1476-4-A**	**03/20/14 10:11**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 12:22**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	130000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	2800	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#924	**14-03-1476-4-A**	**03/20/14 10:11**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 08:05**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1500000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#923-2	**14-03-1476-5-A**	**03/20/14 10:12**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 08:24**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	7900	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

#923-2	**14-03-1476-5-A**	**03/20/14 10:12**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 12:41**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	140000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#924-2	**14-03-1476-6-A**	**03/20/14 10:17**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 22:51**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	15000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	239	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	127	50-130	

#924-2	**14-03-1476-6-A**	**03/20/14 10:17**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 13:00**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	280000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#927	**14-03-1476-7-A**	**03/20/14 10:21**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 09:02**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1248	78000	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	6800	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

#927-2	**14-03-1476-8-A**	**03/20/14 10:23**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 09:22**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	13000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#927-2	**14-03-1476-8-A**	**03/20/14 10:23**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 11:16**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	190000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#926	**14-03-1476-9-A**	**03/20/14 10:26**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 09:41**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1248	92000	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	7700	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 9 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#926-2	**14-03-1476-10-A**	**03/20/14 10:28**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 10:00**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1248	55000	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	5300	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

#925	**14-03-1476-11-A**	**03/20/14 10:31**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 14:16**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	67000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	370	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#925	**14-03-1476-11-A**	**03/20/14 10:31**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 10:19**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1300000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

#925-2	**14-03-1476-12-A**	**03/20/14 10:35**	**Solid**	**GC 31**	**03/20/14**	**03/23/14 00:45**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	25000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	380	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

#925-2	**14-03-1476-12-A**	**03/20/14 10:35**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 14:35**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	490000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 11 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
644-IIB-P/S-CS-001	**14-03-1476-13-A**	**03/20/14 10:43**	**Other**	**GC 31**	**03/20/14**	**03/24/14 14:54**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	99000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

644-IIB-P/S-CS-001	**14-03-1476-13-A**	**03/20/14 10:43**	**Other**	**GC 31**	**03/20/14**	**03/25/14 10:38**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4400000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
644-IIB-P/S-O-001	**14-03-1476-14-A**	**03/20/14 10:45**	**Other**	**GC 31**	**03/20/14**	**03/23/14 01:23**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	20000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	286	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

644-IIB-P/S-O-001	**14-03-1476-14-A**	**03/20/14 10:45**	**Other**	**GC 31**	**03/20/14**	**03/24/14 15:13**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	380000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 13 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-414	**14-03-1476-15-A**	**03/20/14 11:02**	**Other**	**GC 31**	**03/20/14**	**03/24/14 15:33**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	63000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

DC-414	**14-03-1476-15-A**	**03/20/14 11:02**	**Other**	**GC 31**	**03/20/14**	**03/25/14 10:57**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1100000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 14 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
644-IIB-P/S-SS-001	**14-03-1476-16-A**	**03/20/14 13:15**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 17:08**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	290000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	1210	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

644-IIB-P/S-SS-001	**14-03-1476-16-A**	**03/20/14 13:15**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 16:11**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4000000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 15 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
644-IIB-P/S-SS-002	**14-03-1476-17-A**	**03/20/14 13:16**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 17:46**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	310000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	4260	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

644-IIB-P/S-SS-002	**14-03-1476-17-A**	**03/20/14 13:16**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 16:30**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4400000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 16 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
644-IIB-P/S-SS-003	**14-03-1476-18-A**	**03/20/14 13:17**	**Solid**	**GC 31**	**03/20/14**	**03/23/14 02:40**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	33000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	606	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

644-IIB-P/S-SS-003	**14-03-1476-18-A**	**03/20/14 13:17**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 16:49**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	180000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	190	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 17 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
644-IIB-P/S-SS-004	**14-03-1476-19-A**	**03/20/14 13:18**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 11:35**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	300000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	3640	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

644-IIB-P/S-SS-004	**14-03-1476-19-A**	**03/20/14 13:18**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 18:05**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	6500000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	4200	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 18 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
644-IIB-P/S-SS-005	**14-03-1476-20-A**	**03/20/14 13:20**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 18:24**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500000	10000	
Aroclor-1221	ND	500000	10000	
Aroclor-1232	ND	500000	10000	
Aroclor-1242	ND	500000	10000	
Aroclor-1254	ND	500000	10000	
Aroclor-1260	1600000	500000	10000	
Aroclor-1262	ND	500000	10000	
Aroclor-1268	ND	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	16900	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

644-IIB-P/S-SS-005	**14-03-1476-20-A**	**03/20/14 13:20**	**Solid**	**GC 31**	**03/20/14**	**03/25/14 12:12**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	26000000	5000000	100000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 19 of 19

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-218**	**N/A**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 17:28**	**140320L21**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
644-IIB-P/S-SS-005	**Sample**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 18:24**	**140320S21**
644-IIB-P/S-SS-005	**Matrix Spike**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 18:43**	**140320S21**
644-IIB-P/S-SS-005	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/20/14**	**03/24/14 19:02**	**140320S21**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	500000	29480000	5897	31950000	6389	50-135	8	0-25	3
Aroclor-1260	1614000	500000	4283000	534	4501000	577	50-135	5	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1476
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-218	**LCS**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 17:09**	**140320L21**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	101.5	101	50-135	
Aroclor-1260	100.0	108.2	108	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-1476

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-1476

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Wednesday, March 26, 2014 7:34 AM
To: Stephen Nowak
Cc: Costamagna, Daniel G
Subject: Re: Pechiney / 106270030 / CEL 14-03-1476

The COC for this one had an error on it. Sample 644-IIB-P/S-CS-002 should be changed to 644-IIB-P/S-O-001. Would you please make this change and resubmit the report to us? Thanks-sorry about that.

Sent from my iPhone

On Mar 25, 2014, at 3:30 PM, "Stephen Nowak" <snowak@calscience.com> wrote:

> Report, EDD, and Invoice are attached.
>
> Stephen Nowak
> Project Manager
>
> <image004.jpg>
> 7440 Lincoln Way
> Garden Grove, CA 92841-1427
> (714) 895-5494
> www.calscience.com
>
> <image003.jpg>
>
> PRIVACY NOTICE:
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>
> <14-03-1476.pdf>
>
> <14031476.xls>
>
> <1297011.pdf>

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CHAIN-OF-CUSTODY RECORD

NB 31291

PROJECT NAME: PECHINEY			DATE: 3/20/14 PAGE 1 OF 2
PROJECT NUMBER: 106270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:	IRVINE	14-03-1476
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES: 8082 PCB's

	DATE	TIME	SAMPLE NUMBER	8082 PCB's	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/20/14	1007	#923	X	4oz JAR	S			X		1	
2		1007	#922-2	X		S			X		1	
3		1008	#922	X		S			X		1	
4		1011	#924	X		S			X		1	
5		1012	#923-2	X		S			X		1	
6		1017	#924-2	X		S			X		1	
7		1021	#927	X		S			X		1	
8		1023	#927-2	X		S			X		1	
9		1026	#926	X		S			X		1	
10		1028	#926-2	X		S			X		1	
11		1031	#925	X		S			X		1	
12		1035	#925-2	X		S			X		1	
13		1043	644-IIB-P/S-CS-001	X		O			X		1	
14		1045	644-IIB-P/S-CS-002	X		O			X		1	
15	3/20/14	1102	DC-414	X	4oz JAR	O			X		1	

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS:

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: KEN CURNUTT COMPANY: AMEC	3/20/14	1330	SIGNATURE: [signature] PRINTED NAME: STEPHEN THANG COMPANY: AMEC	3/20/14	1330
SIGNATURE: [signature] PRINTED NAME: STEPHEN THANG COMPANY: AMEC	3/20/14	1545	SIGNATURE: [signature] PRINTED NAME: ADAM PETERSEN COMPANY: CEL	3/20/14	1545
SIGNATURE: [signature] PRINTED NAME: ADAM PETERSEN COMPANY: CEL	3/20/14	1804	SIGNATURE: [signature] PRINTED NAME: NOEL CRUZ COMPANY: CEL	3/20/14	1804

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 31292

PROJECT NAME: Pechiney			DATE: 3-20-14 PAGE 2 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC Irvine	REPORTING REQUIREMENTS: 1476
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: Courier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Lew Curant

ANALYSES: 8082 PCBs

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	3-20-14	1315	644-11B-P/S-SS-001	X	4oz JAR	S			X		1	
17	↑	1316	644-11B-P/S-SS-002	X	↑	S			X		1	
18	↓	1317	644-11B-P/S-SS-003	X	↓	S			X		1	
19	↓	1318	644-11B-P/S-SS-004	X	↓	S			X		1	
20	3/20/14	1320	644-11B-P/S-SS-005	X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Lew Curant COMPANY: AMEC	3/20/14	1330	SIGNATURE: [signature] PRINTED NAME: Stephen Huang COMPANY: AMEC	3/20/14	1330
SIGNATURE: [signature] PRINTED NAME: Stephen Huang COMPANY: AMEC	3/20/14	1545	SIGNATURE: [signature] PRINTED NAME: Adam Robson COMPANY: CEL	3/20/14	1545
SIGNATURE: [signature] PRINTED NAME: Adam Robson COMPANY: CEL	3/20/14	1804	SIGNATURE: [signature] PRINTED NAME: Noel Cruik COMPANY: CEL	3/20/14	1804

TOTAL NUMBER OF CONTAINERS: 5

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-1476

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/20/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.1 °C - 0.3 °C (CF) = 0.8 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 300

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 300

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 836

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 300

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-1477

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/24/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Pechiney / 106270030
Work Order Number: 14-03-1477

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-1477 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/20/14. They were assigned to Work Order 14-03-1477.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-1477
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	03/20/14 18:04
		Number of Containers:	4
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#928	14-03-1477-1	03/20/14 11:44	1	Solid
#929	14-03-1477-2	03/20/14 11:45	1	Solid
#930	14-03-1477-3	03/20/14 11:46	1	Solid
#931	14-03-1477-4	03/20/14 13:04	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1477
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/20/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#928 (14-03-1477-1)						
C19-C20	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	77		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	110		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	180		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	190		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	150		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	83		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	840		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#929 (14-03-1477-2)						
C17-C18	6.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	27		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	200		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	220		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	320		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	260		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	120		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	86		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1200		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#930 (14-03-1477-3)						
C19-C20	7.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	6.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	5.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	9.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	18		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	8.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	85		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#931 (14-03-1477-4)						
C33-C36	5.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	32		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#928	**14-03-1477-1-A**	**03/20/14 11:44**	**Solid**	**GC 48**	**03/20/14**	**03/21/14 01:36**	**140320B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	14	5.0	1.00	
C21-C22	24	5.0	1.00	
C23-C24	77	5.0	1.00	
C25-C28	110	5.0	1.00	
C29-C32	180	5.0	1.00	
C33-C36	190	5.0	1.00	
C37-C40	150	5.0	1.00	
C41-C44	83	5.0	1.00	
C6-C44 Total	840	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	97	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#929	**14-03-1477-2-A**	**03/20/14 11:45**	**Solid**	**GC 48**	**03/20/14**	**03/21/14 01:52**	**140320B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	6.7	5.0	1.00	
C19-C20	27	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	200	5.0	1.00	
C25-C28	220	5.0	1.00	
C29-C32	320	5.0	1.00	
C33-C36	260	5.0	1.00	
C37-C40	120	5.0	1.00	
C41-C44	86	5.0	1.00	
C6-C44 Total	1200	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	107	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#930	**14-03-1477-3-A**	**03/20/14 11:46**	**Solid**	**GC 48**	**03/20/14**	**03/21/14 02:07**	**140320B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	7.7	5.0	1.00	
C21-C22	6.2	5.0	1.00	
C23-C24	5.5	5.0	1.00	
C25-C28	9.1	5.0	1.00	
C29-C32	11	5.0	1.00	
C33-C36	14	5.0	1.00	
C37-C40	18	5.0	1.00	
C41-C44	8.6	5.0	1.00	
C6-C44 Total	85	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	108	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#931	**14-03-1477-4-A**	**03/20/14 13:04**	**Solid**	**GC 48**	**03/20/14**	**03/21/14 02:23**	**140320B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	5.1	5.0	1.00	
C37-C40	11	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	32	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-832**	**N/A**	**Solid**	**GC 48**	**03/20/14**	**03/20/14 17:34**	**140320B08**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#928	**14-03-1477-1-A**	**03/20/14 11:44**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 18:04**	**140320L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

#929	**14-03-1477-2-A**	**03/20/14 11:45**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 18:23**	**140320L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	ND	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#930	**14-03-1477-3-A**	**03/20/14 11:46**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 18:42**	**140320L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

#931	**14-03-1477-4-A**	**03/20/14 13:04**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 19:21**	**140320L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	130	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-217**	**N/A**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 04:06**	**140320L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1434-8	**Sample**	**Solid**	**GC 48**	**03/20/14**	**03/20/14 18:37**	**140320S08**
14-03-1434-8	**Matrix Spike**	**Solid**	**GC 48**	**03/20/14**	**03/20/14 18:06**	**140320S08**
14-03-1434-8	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**03/20/14**	**03/20/14 18:21**	**140320S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	17.37	400.0	390.4	93	383.9	92	64-130	2	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#931	**Sample**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 19:21**	**140320S20**
#931	**Matrix Spike**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 19:21**	**140320S20**
#931	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 19:40**	**140320S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	538.0	538	424.5	425	50-135	24	0-25	3
Aroclor-1260	ND	100.0	181.9	182	169.6	170	50-135	7	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-832	**LCS**	**Solid**	**GC 48**	**03/20/14**	**03/20/14 17:50**	**140320B08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	383.9	96	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/20/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1477
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-217	**LCS**	**Solid**	**GC 31**	**03/20/14**	**03/22/14 03:47**	**140320L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	98.45	98	50-135	
Aroclor-1260	100.0	95.62	96	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-1477

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-1477

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31293

PROJECT NAME: PECHENKY		DATE: 3/20/14	PAGE 1 OF 1
PROJECT NUMBER: 206270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC EARTH	REPORTING REQUIREMENTS: 14-03-1477
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 Hr			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	EPA 8015-TPH	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/20/14	1144	#928	X	X	4oz JAR	S			X			
2	↑	1145	#929	X	X	↑	S			X			
3	↓	1146	#930	X	X	↓	S			X			
4	3/20/14	1304	#931	X	X	4oz JAR	S			X			

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: KEN CURNUTT COMPANY: AMEC	3/20/14	1330	SIGNATURE: [signature] PRINTED NAME: STEPHEN HENRY COMPANY: AMEC	3/20/14	1330
SIGNATURE: [signature] PRINTED NAME: STEPHEN HENRY COMPANY: AMEC	3/20/14	1545	SIGNATURE: [signature] PRINTED NAME: Adam Petersen COMPANY: CEL	3/20/14	1545
SIGNATURE: [signature] PRINTED NAME: Adam Petersen COMPANY: CEL	3/20/14	1804	SIGNATURE: [signature] PRINTED NAME: NOEL CRUZ COMPANY: CEL	3/20/14	1804

TOTAL NUMBER OF CONTAINERS: 4

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-1477

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/20/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.1 °C - 0.3 °C (CF) = 0.8 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 300

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 300

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 826

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 300

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-1688

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/26/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-03-1688

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-1688 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/24/14. They were assigned to Work Order 14-03-1688.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-1688
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	03/24/14 16:27
		Number of Containers:	7
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
647-IV-P/S-O-001	14-03-1688-1	03/24/14 09:50	1	Aqueous
DC-415	14-03-1688-2	03/24/14 10:16	1	Other
#934	14-03-1688-3	03/24/14 10:19	1	Solid
646-IV-P/S-CS-001	14-03-1688-4	03/24/14 10:25	1	Concrete
646-IV-P/S-CS-002	14-03-1688-5	03/24/14 10:30	1	Concrete
259-IIB-P/S-SS-001	14-03-1688-6	03/24/14 14:35	1	Solid
259-IIB-P/S-SS-002	14-03-1688-7	03/24/14 14:39	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1688
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/24/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
647-IV-P/S-O-001 (14-03-1688-1)						
Arsenic	0.0190		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Barium	0.0270		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Chromium	0.0106		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Copper	0.156		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Lead	0.849		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Molybdenum	0.0313		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Nickel	0.0160		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Vanadium	0.0283		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Zinc	0.142		0.0100	mg/L	EPA 6010B	EPA 3010A Total
C6-C44 Total	450		100	ug/L	EPA 8015B (M)	EPA 3510C
Acetone	25		20	ug/L	EPA 8260B	EPA 5030C
DC-415 (14-03-1688-2)						
Aroclor-1248	400		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	140		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1688
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/24/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#934 (14-03-1688-3)						
Arsenic	1.31		0.732	mg/kg	EPA 6010B	EPA 3050B
Barium	91.1		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.299		0.244	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.2		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.97		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	29.1		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	8.54		0.488	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.96		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	24.4		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	59.4		0.976	mg/kg	EPA 6010B	EPA 3050B
C9-C10	430		99	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	140		99	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	400		99	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	1000		99	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	1900		99	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	2500		99	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	2300		99	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	2100		99	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	2100		99	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	2900		99	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	3000		99	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	4000		99	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	3100		99	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	26000		99	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	2200		500	ug/kg	EPA 8082	EPA 3540C
n-Butylbenzene	3200		510	ug/kg	EPA 8260B	EPA 5030C
sec-Butylbenzene	1900		510	ug/kg	EPA 8260B	EPA 5030C
p-Isopropyltoluene	2400		510	ug/kg	EPA 8260B	EPA 5030C
n-Propylbenzene	1500		510	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	12000		510	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	3400		510	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	570		510	ug/kg	EPA 8260B	EPA 5030C
259-IIB-P/S-SS-001 (14-03-1688-6)						
Aroclor-1248	69000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	3900		500	ug/kg	EPA 8082	EPA 3540C
259-IIB-P/S-SS-002 (14-03-1688-7)						
Aroclor-1248	21000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1900		500	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1688
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/24/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#934	**14-03-1688-3-A**	**03/24/14 10:19**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 18:25**	**140325B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	99	19.8	
C7	ND	99	19.8	
C8	ND	99	19.8	
C9-C10	430	99	19.8	
C11-C12	140	99	19.8	
C13-C14	400	99	19.8	
C15-C16	1000	99	19.8	
C17-C18	1900	99	19.8	
C19-C20	2500	99	19.8	
C21-C22	2300	99	19.8	
C23-C24	2100	99	19.8	
C25-C28	2100	99	19.8	
C29-C32	2900	99	19.8	
C33-C36	3000	99	19.8	
C37-C40	4000	99	19.8	
C41-C44	3100	99	19.8	
C6-C44 Total	26000	99	19.8	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-839**	**N/A**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 16:36**	**140325B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-O-001	**14-03-1688-1-E**	**03/24/14 09:50**	**Aqueous**	**GC 45**	**03/25/14**	**03/25/14 21:25**	**140325B04**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1.00	
C7	ND	100	1.00	
C8	ND	100	1.00	
C9-C10	ND	100	1.00	
C11-C12	ND	100	1.00	
C13-C14	ND	100	1.00	
C15-C16	ND	100	1.00	
C17-C18	ND	100	1.00	
C19-C20	ND	100	1.00	
C21-C22	ND	100	1.00	
C23-C24	ND	100	1.00	
C25-C28	ND	100	1.00	
C29-C32	ND	100	1.00	
C33-C36	ND	100	1.00	
C37-C40	ND	100	1.00	
C41-C44	ND	100	1.00	
C6-C44 Total	450	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	68-140	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-498-154**	**N/A**	**Aqueous**	**GC 45**	**03/25/14**	**03/25/14 18:45**	**140325B04**

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1.00	
C7	ND	100	1.00	
C8	ND	100	1.00	
C9-C10	ND	100	1.00	
C11-C12	ND	100	1.00	
C13-C14	ND	100	1.00	
C15-C16	ND	100	1.00	
C17-C18	ND	100	1.00	
C19-C20	ND	100	1.00	
C21-C22	ND	100	1.00	
C23-C24	ND	100	1.00	
C25-C28	ND	100	1.00	
C29-C32	ND	100	1.00	
C33-C36	ND	100	1.00	
C37-C40	ND	100	1.00	
C41-C44	ND	100	1.00	
C6-C44 Total	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	68-140	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#934	**14-03-1688-3-A**	**03/24/14 10:19**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:30**	**140324L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.732	0.976	
Arsenic	1.31	0.732	0.976	
Barium	91.1	0.488	0.976	
Beryllium	0.299	0.244	0.976	
Cadmium	ND	0.488	0.976	
Chromium	11.2	0.244	0.976	
Cobalt	7.97	0.244	0.976	
Copper	29.1	0.488	0.976	
Lead	8.54	0.488	0.976	
Molybdenum	ND	0.244	0.976	
Nickel	8.96	0.244	0.976	
Selenium	ND	0.732	0.976	
Silver	ND	0.244	0.976	
Thallium	ND	0.732	0.976	
Vanadium	24.4	0.244	0.976	
Zinc	59.4	0.976	0.976	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18195**	**N/A**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:25**	**140324L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-O-001	**14-03-1688-1-F**	**03/24/14 09:50**	**Aqueous**	**ICP 7300**	**03/24/14**	**03/25/14 13:45**	**140324LA6**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1.00	
Arsenic	0.0190	0.0100	1.00	
Barium	0.0270	0.0100	1.00	
Beryllium	ND	0.0100	1.00	
Cadmium	ND	0.0100	1.00	
Chromium	0.0106	0.0100	1.00	
Cobalt	ND	0.0100	1.00	
Copper	0.156	0.0100	1.00	
Lead	0.849	0.0100	1.00	
Molybdenum	0.0313	0.0100	1.00	
Nickel	0.0160	0.0100	1.00	
Selenium	ND	0.0150	1.00	
Silver	ND	0.00500	1.00	
Thallium	ND	0.0150	1.00	
Vanadium	0.0283	0.0100	1.00	
Zinc	0.142	0.0100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-003-14120**	**N/A**	**Aqueous**	**ICP 7300**	**03/24/14**	**03/25/14 11:38**	**140324LA6**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1.00	
Arsenic	ND	0.0100	1.00	
Barium	ND	0.0100	1.00	
Beryllium	ND	0.0100	1.00	
Cadmium	ND	0.0100	1.00	
Chromium	ND	0.0100	1.00	
Cobalt	ND	0.0100	1.00	
Copper	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	
Molybdenum	ND	0.0100	1.00	
Nickel	ND	0.0100	1.00	
Selenium	ND	0.0150	1.00	
Silver	ND	0.00500	1.00	
Thallium	ND	0.0150	1.00	
Vanadium	ND	0.0100	1.00	
Zinc	ND	0.0100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
		Units:	mg/L
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-O-001	**14-03-1688-1-F**	**03/24/14 09:50**	**Aqueous**	**Mercury**	**03/24/14**	**03/25/14 17:24**	**140324L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1.00	

Method Blank	**099-04-008-6900**	**N/A**	**Aqueous**	**Mercury**	**03/24/14**	**03/25/14 13:35**	**140324L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#934	**14-03-1688-3-A**	**03/24/14 10:19**	**Solid**	**Mercury**	**03/25/14**	**03/25/14 15:36**	**140325L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

Method Blank	**099-16-272-118**	**N/A**	**Solid**	**Mercury**	**03/25/14**	**03/25/14 14:36**	**140325L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-415	**14-03-1688-2-A**	**03/24/14 10:16**	**Other**	**GC 31**	**03/24/14**	**03/26/14 14:40**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	400	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	140	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	65	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

#934	**14-03-1688-3-A**	**03/24/14 10:19**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 15:19**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	2200	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	67	60-125	
2,4,5,6-Tetrachloro-m-Xylene	8608	50-130	1,2,7

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
646-IV-P/S-CS-001	**14-03-1688-4-A**	**03/24/14 10:25**	**Concrete**	**GC 31**	**03/24/14**	**03/26/14 04:26**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

646-IV-P/S-CS-002	**14-03-1688-5-A**	**03/24/14 10:30**	**Concrete**	**GC 31**	**03/24/14**	**03/26/14 04:45**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
259-IIB-P/S-SS-001	**14-03-1688-6-A**	**03/24/14 14:35**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 14:02**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	3900	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	60-125	
2,4,5,6-Tetrachloro-m-Xylene	68	50-130	

259-IIB-P/S-SS-001	**14-03-1688-6-A**	**03/24/14 14:35**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 13:05**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	69000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	60-125	
2,4,5,6-Tetrachloro-m-Xylene	270	50-130	1,2,7

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
259-IIB-P/S-SS-002	**14-03-1688-7-A**	**03/24/14 14:39**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 13:43**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	1900	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	72	50-130	

259-IIB-P/S-SS-002	**14-03-1688-7-A**	**03/24/14 14:39**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 13:24**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	21000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-219**	**N/A**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 02:32**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-O-001	**14-03-1688-1-D**	**03/24/14 09:50**	**Aqueous**	**GC 31**	**03/24/14**	**03/26/14 01:54**	**140324L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	0.98	1.00	
Aroclor-1221	ND	0.98	1.00	
Aroclor-1232	ND	0.98	1.00	
Aroclor-1242	ND	0.98	1.00	
Aroclor-1248	ND	0.98	1.00	
Aroclor-1254	ND	0.98	1.00	
Aroclor-1260	ND	0.98	1.00	
Aroclor-1262	ND	0.98	1.00	
Aroclor-1268	ND	0.98	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	73	50-135	
2,4,5,6-Tetrachloro-m-Xylene	68	50-135	

Method Blank	**099-12-640-24**	**N/A**	**Aqueous**	**GC 31**	**03/24/14**	**03/26/14 01:35**	**140324L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1.0	1.00	
Aroclor-1221	ND	1.0	1.00	
Aroclor-1232	ND	1.0	1.00	
Aroclor-1242	ND	1.0	1.00	
Aroclor-1248	ND	1.0	1.00	
Aroclor-1254	ND	1.0	1.00	
Aroclor-1260	ND	1.0	1.00	
Aroclor-1262	ND	1.0	1.00	
Aroclor-1268	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	50-135	
2,4,5,6-Tetrachloro-m-Xylene	100	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-O-001	**14-03-1688-1-B**	**03/24/14 09:50**	**Aqueous**	**GC/MS O**	**03/25/14**	**03/25/14 21:22**	**140325L014**

Parameter	Result	RL	DF	Qualifiers
Acetone	25	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	03/24/14
121 Innovation Drive, Suite 200	Work Order:	14-03-1688
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: Pechiney / 106270030		Page 2 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	80-120	
Dibromofluoromethane	116	78-126	
1,2-Dichloroethane-d4	109	75-135	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-13539**	**N/A**	**Aqueous**	**GC/MS O**	**03/25/14**	**03/25/14 17:35**	**140325L014**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Pechiney / 106270030			Page 4 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	80-120	
Dibromofluoromethane	103	78-126	
1,2-Dichloroethane-d4	106	75-135	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#934	**14-03-1688-3-A**	**03/24/14 10:19**	**Solid**	**GC/MS BB**	**03/24/14**	**03/25/14 20:14**	**140325L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	13000	100	
Benzene	ND	510	100	
Bromobenzene	ND	510	100	
Bromochloromethane	ND	510	100	
Bromodichloromethane	ND	510	100	
Bromoform	ND	510	100	
Bromomethane	ND	2600	100	
2-Butanone	ND	5100	100	
n-Butylbenzene	3200	510	100	
sec-Butylbenzene	1900	510	100	
tert-Butylbenzene	ND	510	100	
Carbon Disulfide	ND	5100	100	
Carbon Tetrachloride	ND	510	100	
Chlorobenzene	ND	510	100	
Chloroethane	ND	510	100	
Chloroform	ND	510	100	
Chloromethane	ND	2600	100	
2-Chlorotoluene	ND	510	100	
4-Chlorotoluene	ND	510	100	
Dibromochloromethane	ND	510	100	
1,2-Dibromo-3-Chloropropane	ND	1000	100	
1,2-Dibromoethane	ND	510	100	
Dibromomethane	ND	510	100	
1,2-Dichlorobenzene	ND	510	100	
1,3-Dichlorobenzene	ND	510	100	
1,4-Dichlorobenzene	ND	510	100	
Dichlorodifluoromethane	ND	510	100	
1,1-Dichloroethane	ND	510	100	
1,2-Dichloroethane	ND	510	100	
1,1-Dichloroethene	ND	510	100	
c-1,2-Dichloroethene	ND	510	100	
t-1,2-Dichloroethene	ND	510	100	
1,2-Dichloropropane	ND	510	100	
1,3-Dichloropropane	ND	510	100	
2,2-Dichloropropane	ND	510	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure	Date Received:	03/24/14
121 Innovation Drive, Suite 200	Work Order:	14-03-1688
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 106270030		Page 2 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	510	100	
c-1,3-Dichloropropene	ND	510	100	
t-1,3-Dichloropropene	ND	510	100	
Ethylbenzene	ND	510	100	
2-Hexanone	ND	5100	100	
Isopropylbenzene	ND	510	100	
p-Isopropyltoluene	2400	510	100	
Methylene Chloride	ND	5100	100	
4-Methyl-2-Pentanone	ND	5100	100	
Naphthalene	ND	5100	100	
n-Propylbenzene	1500	510	100	
Styrene	ND	510	100	
1,1,1,2-Tetrachloroethane	ND	510	100	
1,1,2,2-Tetrachloroethane	ND	510	100	
Tetrachloroethene	ND	510	100	
Toluene	ND	510	100	
1,2,3-Trichlorobenzene	ND	1000	100	
1,2,4-Trichlorobenzene	ND	510	100	
1,1,1-Trichloroethane	ND	510	100	
1,1,2-Trichloroethane	ND	510	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5100	100	
Trichloroethene	ND	510	100	
1,2,3-Trichloropropane	ND	510	100	
1,2,4-Trimethylbenzene	12000	510	100	
Trichlorofluoromethane	ND	5100	100	
1,3,5-Trimethylbenzene	3400	510	100	
Vinyl Acetate	ND	5100	100	
Vinyl Chloride	ND	510	100	
p/m-Xylene	570	510	100	
o-Xylene	ND	510	100	
Methyl-t-Butyl Ether (MTBE)	ND	510	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	60-132	
Dibromofluoromethane	94	63-141	
1,2-Dichloroethane-d4	91	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8321**	**N/A**	**Solid**	**GC/MS BB**	**03/25/14**	**03/25/14 16:37**	**140325L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	100	
Benzene	ND	500	100	
Bromobenzene	ND	500	100	
Bromochloromethane	ND	500	100	
Bromodichloromethane	ND	500	100	
Bromoform	ND	500	100	
Bromomethane	ND	2500	100	
2-Butanone	ND	5000	100	
n-Butylbenzene	ND	500	100	
sec-Butylbenzene	ND	500	100	
tert-Butylbenzene	ND	500	100	
Carbon Disulfide	ND	5000	100	
Carbon Tetrachloride	ND	500	100	
Chlorobenzene	ND	500	100	
Chloroethane	ND	500	100	
Chloroform	ND	500	100	
Chloromethane	ND	2500	100	
2-Chlorotoluene	ND	500	100	
4-Chlorotoluene	ND	500	100	
Dibromochloromethane	ND	500	100	
1,2-Dibromo-3-Chloropropane	ND	1000	100	
1,2-Dibromoethane	ND	500	100	
Dibromomethane	ND	500	100	
1,2-Dichlorobenzene	ND	500	100	
1,3-Dichlorobenzene	ND	500	100	
1,4-Dichlorobenzene	ND	500	100	
Dichlorodifluoromethane	ND	500	100	
1,1-Dichloroethane	ND	500	100	
1,2-Dichloroethane	ND	500	100	
1,1-Dichloroethene	ND	500	100	
c-1,2-Dichloroethene	ND	500	100	
t-1,2-Dichloroethene	ND	500	100	
1,2-Dichloropropane	ND	500	100	
1,3-Dichloropropane	ND	500	100	
2,2-Dichloropropane	ND	500	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	03/24/14
121 Innovation Drive, Suite 200	Work Order:	14-03-1688
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 106270030		Page 4 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	100	
c-1,3-Dichloropropene	ND	500	100	
t-1,3-Dichloropropene	ND	500	100	
Ethylbenzene	ND	500	100	
2-Hexanone	ND	5000	100	
Isopropylbenzene	ND	500	100	
p-Isopropyltoluene	ND	500	100	
Methylene Chloride	ND	5000	100	
4-Methyl-2-Pentanone	ND	5000	100	
Naphthalene	ND	5000	100	
n-Propylbenzene	ND	500	100	
Styrene	ND	500	100	
1,1,1,2-Tetrachloroethane	ND	500	100	
1,1,2,2-Tetrachloroethane	ND	500	100	
Tetrachloroethene	ND	500	100	
Toluene	ND	500	100	
1,2,3-Trichlorobenzene	ND	1000	100	
1,2,4-Trichlorobenzene	ND	500	100	
1,1,1-Trichloroethane	ND	500	100	
1,1,2-Trichloroethane	ND	500	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	100	
Trichloroethene	ND	500	100	
1,2,3-Trichloropropane	ND	500	100	
1,2,4-Trimethylbenzene	ND	500	100	
Trichlorofluoromethane	ND	5000	100	
1,3,5-Trimethylbenzene	ND	500	100	
Vinyl Acetate	ND	5000	100	
Vinyl Chloride	ND	500	100	
p/m-Xylene	ND	500	100	
o-Xylene	ND	500	100	
Methyl-t-Butyl Ether (MTBE)	ND	500	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	109	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1717-1	**Sample**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 17:38**	**140325S01**
14-03-1717-1	**Matrix Spike**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 17:07**	**140325S01**
14-03-1717-1	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 17:23**	**140325S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	1009	400.0	994.2	0	909.9	0	64-130	9	0-15	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1689-1	**Sample**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:27**	**140324S05**
14-03-1689-1	**Matrix Spike**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:28**	**140324S05**
14-03-1689-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:29**	**140324S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.985	28	5.944	24	50-115	16	0-20	3
Arsenic	1.139	25.00	25.01	95	24.78	95	75-125	1	0-20	
Barium	76.68	25.00	117.2	162	117.9	165	75-125	1	0-20	3
Beryllium	0.4107	25.00	25.26	99	25.64	101	75-125	1	0-20	
Cadmium	ND	25.00	24.56	98	24.88	100	75-125	1	0-20	
Chromium	12.57	25.00	37.13	98	36.86	97	75-125	1	0-20	
Cobalt	7.557	25.00	33.59	104	33.61	104	75-125	0	0-20	
Copper	9.532	25.00	37.01	110	36.80	109	75-125	1	0-20	
Lead	5.046	25.00	30.64	102	31.16	104	75-125	2	0-20	
Molybdenum	ND	25.00	22.26	89	22.23	89	75-125	0	0-20	
Nickel	8.095	25.00	33.30	101	32.86	99	75-125	1	0-20	
Selenium	ND	25.00	20.74	83	22.08	88	75-125	6	0-20	
Silver	ND	12.50	12.09	97	12.23	98	75-125	1	0-20	
Thallium	ND	25.00	21.47	86	21.92	88	75-125	2	0-20	
Vanadium	27.62	25.00	53.10	102	52.17	98	75-125	2	0-20	
Zinc	33.37	25.00	60.92	110	60.81	110	75-125	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 3 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1596-1	**Sample**	**Aqueous**	**ICP 7300**	**03/24/14**	**03/25/14 12:02**	**140324SA6**
14-03-1596-1	**Matrix Spike**	**Aqueous**	**ICP 7300**	**03/24/14**	**03/25/14 12:04**	**140324SA6**
14-03-1596-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP 7300**	**03/24/14**	**03/25/14 12:05**	**140324SA6**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	0.5000	0.5422	108	0.5550	111	80-120	2	0-20	
Arsenic	ND	0.5000	0.5704	114	0.5775	116	80-120	1	0-20	
Barium	0.1194	0.5000	0.6411	104	0.6450	105	80-120	1	0-20	
Beryllium	ND	0.5000	0.5565	111	0.5619	112	80-120	1	0-20	
Cadmium	ND	0.5000	0.5389	108	0.5432	109	80-120	1	0-20	
Chromium	ND	0.5000	0.5337	107	0.5409	108	80-120	1	0-20	
Cobalt	ND	0.5000	0.5384	108	0.5423	108	80-120	1	0-20	
Copper	ND	0.5000	0.5225	104	0.5216	104	80-120	0	0-20	
Lead	ND	0.5000	0.5317	106	0.5371	107	80-120	1	0-20	
Molybdenum	ND	0.5000	0.5559	111	0.5624	112	80-120	1	0-20	
Nickel	ND	0.5000	0.5264	105	0.5297	106	80-120	1	0-20	
Selenium	ND	0.5000	0.5349	107	0.5518	110	80-120	3	0-20	
Silver	ND	0.2500	0.2784	111	0.2818	113	80-120	1	0-20	
Thallium	ND	0.5000	0.5497	110	0.5540	111	80-120	1	0-20	
Vanadium	ND	0.5000	0.5424	108	0.5471	109	80-120	1	0-20	
Zinc	0.01397	0.5000	0.5544	108	0.5553	108	80-120	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 7470A Filt.
		Method:	EPA 7470A
Project: Pechiney / 106270030			Page 4 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1427-4	**Sample**	**Aqueous**	**Mercury**	**03/24/14**	**03/25/14 13:44**	**140324S05**
14-03-1427-4	**Matrix Spike**	**Aqueous**	**Mercury**	**03/24/14**	**03/25/14 13:46**	**140324S05**
14-03-1427-4	**Matrix Spike Duplicate**	**Aqueous**	**Mercury**	**03/24/14**	**03/25/14 13:48**	**140324S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.01000	0.009676	97	0.009745	97	57-141	1	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 5 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1629-3	**Sample**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:23**	**140325S02**
14-03-1629-3	**Matrix Spike**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:25**	**140325S02**
14-03-1629-3	**Matrix Spike Duplicate**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:27**	**140325S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.08457	0.8350	0.8224	88	0.8428	91	76-136	2	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 6 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1689-1	**Sample**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 03:29**	**140324S10**
14-03-1689-1	**Matrix Spike**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 02:51**	**140324S10**
14-03-1689-1	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 03:10**	**140324S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	99.56	100	97.32	97	50-135	2	0-25	
Aroclor-1260	ND	100.0	104.2	104	98.76	99	50-135	5	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 7 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1470-31	**Sample**	**Aqueous**	**GC/MS O**	**03/25/14**	**03/25/14 18:03**	**140325S015**
14-03-1470-31	**Matrix Spike**	**Aqueous**	**GC/MS O**	**03/25/14**	**03/25/14 18:32**	**140325S015**
14-03-1470-31	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS O**	**03/25/14**	**03/25/14 19:00**	**140325S015**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	25.16	50.00	72.94	96	77.48	105	74-122	6	0-21	
Carbon Tetrachloride	ND	50.00	54.95	110	56.56	113	60-144	3	0-21	
Chlorobenzene	ND	50.00	53.72	107	55.81	112	73-120	4	0-22	
1,2-Dibromoethane	ND	50.00	50.55	101	53.22	106	80-122	5	0-20	
1,2-Dichlorobenzene	ND	50.00	54.59	109	58.01	116	70-120	6	0-26	
1,2-Dichloroethane	ND	50.00	54.11	108	55.05	110	64-142	2	0-20	
1,1-Dichloroethene	ND	50.00	54.61	109	57.20	114	52-136	5	0-21	
Ethylbenzene	16.33	50.00	72.38	112	75.67	119	77-125	4	0-24	
Toluene	8.323	50.00	62.00	107	63.33	110	72-126	2	0-23	
Trichloroethene	ND	50.00	51.97	104	55.19	110	74-128	6	0-22	
Vinyl Chloride	ND	50.00	44.53	89	47.14	94	67-133	6	0-20	
p/m-Xylene	31.76	100.0	143.6	112	148.6	117	63-129	3	0-25	
o-Xylene	1.299	50.00	60.90	119	61.67	121	62-128	1	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	49.05	98	52.82	106	68-134	7	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 8 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1695-1	**Sample**	**Solid**	**GC/MS BB**	**03/25/14**	**03/25/14 17:04**	**140325S006**
14-03-1695-1	**Matrix Spike**	**Solid**	**GC/MS BB**	**03/25/14**	**03/25/14 19:20**	**140325S006**
14-03-1695-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS BB**	**03/25/14**	**03/25/14 19:47**	**140325S006**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	45.47	91	45.01	90	61-127	1	0-20	
Carbon Tetrachloride	ND	50.00	46.60	93	46.17	92	51-135	1	0-29	
Chlorobenzene	ND	50.00	49.05	98	49.18	98	57-123	0	0-20	
1,2-Dibromoethane	ND	50.00	47.41	95	47.14	94	64-124	1	0-20	
1,2-Dichlorobenzene	ND	50.00	48.32	97	48.31	97	35-131	0	0-25	
1,2-Dichloroethane	ND	50.00	45.82	92	45.40	91	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	48.84	98	49.31	99	47-143	1	0-25	
Ethylbenzene	ND	50.00	49.00	98	48.25	97	57-129	2	0-22	
Toluene	ND	50.00	47.33	95	46.81	94	63-123	1	0-20	
Trichloroethene	ND	50.00	45.59	91	46.85	94	44-158	3	0-20	
Vinyl Chloride	ND	50.00	48.93	98	50.91	102	49-139	4	0-47	
p/m-Xylene	ND	100.0	96.43	96	95.20	95	70-130	1	0-30	
o-Xylene	ND	50.00	50.12	100	49.36	99	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	47.86	96	47.26	95	57-123	1	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - PDS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-03-1596-1	**Sample**	**Aqueous**	**ICP 7300**	**03/24/14 00:00**	**03/25/14 12:02**	**140324SA6**
14-03-1596-1	**PDS**	**Aqueous**	**ICP 7300**	**03/24/14 00:00**	**03/25/14 12:06**	**140324SA6**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Antimony	ND	0.5000	0.4757	95	75-125	
Arsenic	ND	0.5000	0.4967	99	75-125	
Barium	0.1194	0.5000	0.6193	100	75-125	
Beryllium	ND	0.5000	0.5443	109	75-125	
Cadmium	ND	0.5000	0.5251	105	75-125	
Chromium	ND	0.5000	0.5284	106	75-125	
Cobalt	ND	0.5000	0.5320	106	75-125	
Copper	ND	0.5000	0.5083	102	75-125	
Lead	ND	0.5000	0.5213	104	75-125	
Molybdenum	ND	0.5000	0.5508	110	75-125	
Nickel	ND	0.5000	0.5183	104	75-125	
Selenium	ND	0.5000	0.5398	108	75-125	
Silver	ND	0.2500	0.2614	105	75-125	
Thallium	ND	0.5000	0.5375	107	75-125	
Vanadium	ND	0.5000	0.5316	106	75-125	
Zinc	0.01397	0.5000	0.5742	112	75-125	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-839	**LCS**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 16:52**	**140325B01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	347.2	87	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 2 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-498-154	**LCS**	**Aqueous**	**GC 45**	**03/25/14**	**03/25/14 19:02**	**140325B04**
099-15-498-154	**LCSD**	**Aqueous**	**GC 45**	**03/25/14**	**03/25/14 19:19**	**140325B04**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	4000	3343	84	3320	83	75-117	1	0-13	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 3 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18195	**LCS**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:26**	**140324L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.78	107	80-120	73-127	
Arsenic	25.00	25.13	101	80-120	73-127	
Barium	25.00	25.85	103	80-120	73-127	
Beryllium	25.00	25.42	102	80-120	73-127	
Cadmium	25.00	26.83	107	80-120	73-127	
Chromium	25.00	25.79	103	80-120	73-127	
Cobalt	25.00	29.07	116	80-120	73-127	
Copper	25.00	28.31	113	80-120	73-127	
Lead	25.00	27.88	112	80-120	73-127	
Molybdenum	25.00	27.02	108	80-120	73-127	
Nickel	25.00	27.74	111	80-120	73-127	
Selenium	25.00	24.24	97	80-120	73-127	
Silver	12.50	13.12	105	80-120	73-127	
Thallium	25.00	27.61	110	80-120	73-127	
Vanadium	25.00	25.45	102	80-120	73-127	
Zinc	25.00	27.55	110	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 4 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-003-14120	**LCS**	**Aqueous**	**ICP 7300**	**03/24/14**	**03/25/14 11:45**	**140324LA6**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	0.5000	0.5267	105	80-120	73-127	
Arsenic	0.5000	0.5087	102	80-120	73-127	
Barium	0.5000	0.5156	103	80-120	73-127	
Beryllium	0.5000	0.4992	100	80-120	73-127	
Cadmium	0.5000	0.5178	104	80-120	73-127	
Chromium	0.5000	0.5110	102	80-120	73-127	
Cobalt	0.5000	0.5648	113	80-120	73-127	
Copper	0.5000	0.5241	105	80-120	73-127	
Lead	0.5000	0.5368	107	80-120	73-127	
Molybdenum	0.5000	0.5197	104	80-120	73-127	
Nickel	0.5000	0.5514	110	80-120	73-127	
Selenium	0.5000	0.4879	98	80-120	73-127	
Silver	0.2500	0.2559	102	80-120	73-127	
Thallium	0.5000	0.5448	109	80-120	73-127	
Vanadium	0.5000	0.4961	99	80-120	73-127	
Zinc	0.5000	0.5069	101	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
Project: Pechiney / 106270030			Page 5 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-04-008-6900	**LCS**	**Aqueous**	**Mercury**	**03/24/14**	**03/25/14 13:37**	**140324L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.01000	0.01016	102	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 6 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-118	**LCS**	**Solid**	**Mercury**	**03/25/14**	**03/25/14 14:39**	**140325L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8758	105	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 7 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-219	**LCS**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 02:13**	**140324L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	102.6	103	50-135	
Aroclor-1260	100.0	101.0	101	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 8 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-640-24	**LCS**	**Aqueous**	**GC 31**	**03/24/14**	**03/26/14 00:57**	**140324L11**
099-12-640-24	**LCSD**	**Aqueous**	**GC 31**	**03/24/14**	**03/26/14 01:16**	**140324L11**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	1.882	94	2.045	102	50-135	8	0-25	
Aroclor-1260	2.000	1.788	89	1.958	98	50-135	9	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 9 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-001-13539	**LCS**	**Aqueous**	**GC/MS O**	**03/25/14**	**03/25/14 15:05**	**140325L014**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	51.95	104	80-120	73-127	
Carbon Tetrachloride	50.00	56.60	113	67-139	55-151	
Chlorobenzene	50.00	55.02	110	78-120	71-127	
1,2-Dibromoethane	50.00	53.79	108	80-120	73-127	
1,2-Dichlorobenzene	50.00	54.08	108	63-129	52-140	
1,2-Dichloroethane	50.00	55.71	111	70-130	60-140	
1,1-Dichloroethene	50.00	58.56	117	66-126	56-136	
Ethylbenzene	50.00	57.52	115	80-123	73-130	
Toluene	50.00	52.86	106	80-120	73-127	
Trichloroethene	50.00	53.26	107	80-122	73-129	
Vinyl Chloride	50.00	47.00	94	70-130	60-140	
p/m-Xylene	100.0	114.6	115	75-123	67-131	
o-Xylene	50.00	59.23	118	74-122	66-130	
Methyl-t-Butyl Ether (MTBE)	50.00	53.06	106	69-129	59-139	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1688
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 10 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8321	**LCS**	**Solid**	**GC/MS BB**	**03/25/14**	**03/25/14 14:58**	**140325L021**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	50.38	101	78-120	71-127	
Carbon Tetrachloride	50.00	56.67	113	49-139	34-154	
Chlorobenzene	50.00	54.54	109	79-120	72-127	
1,2-Dibromoethane	50.00	52.16	104	80-120	73-127	
1,2-Dichlorobenzene	50.00	54.54	109	75-120	68-128	
1,2-Dichloroethane	50.00	54.71	109	80-120	73-127	
1,1-Dichloroethene	50.00	54.06	108	74-122	66-130	
Ethylbenzene	50.00	54.58	109	76-120	69-127	
Toluene	50.00	52.09	104	77-120	70-127	
Trichloroethene	50.00	53.80	108	80-120	73-127	
Vinyl Chloride	50.00	60.20	120	68-122	59-131	
p/m-Xylene	100.0	109.4	109	75-125	67-133	
o-Xylene	50.00	56.41	113	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	51.67	103	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-1688

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3010A Total	469	ICP 7300	1
EPA 6010B	EPA 3050B	598	ICP 7300	1
EPA 7470A	EPA 7470A Total	769	Mercury	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3510C	682	GC 45	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3510C	669	GC 31	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	823	GC/MS BB	2
EPA 8260B	EPA 5030C	867	GC/MS O	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-1688

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31294

PROJECT NAME: PECHINEY			DATE: 3/24/14 PAGE 1 OF 1
PROJECT NUMBER: 10627 0030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 14-03-1688
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEV CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	8260 VOCs	TITLE 22 METALS	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/24/14	0950	647-III-P/S-0-001	X	X	X	X	MULTIPLE	W		HCl HNO3	X		6	
2		1016	DC-415	X				4oz glass jar	O			X		1	
3		1019	#928	X	X	X	X		S			X		1	
4		1025	646-III-P/S-CS-001	X					O			X		1	concrete
5		1030	646-III-P/S-CS-002	X					O			X		1	concrete
6		1435	259-IIB-P/S-SS-001	X					S			X		1	
7		1439	259-IIB-P/S-SS-002	X					S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: PRINTED NAME: KEV CURNUTT COMPANY: AMEC	3/24/14	1440	SIGNATURE: PRINTED NAME: STEPHEN HWANG COMPANY: AMEC	3/24/14	1440
SIGNATURE: PRINTED NAME: STEPHEN HWANG COMPANY: AMEC	3/24/14	1520	SIGNATURE: PRINTED NAME: ADAM PETERSEN COMPANY: CEL	3/24/14	1520
SIGNATURE: PRINTED NAME: ADAM PETERSEN COMPANY: CEL	3/24/14	1627	SIGNATURE: PRINTED NAME: DANNY CZ COMPANY: CEL	3/24/14	16:27

TOTAL NUMBER OF CONTAINERS: 12

SAMPLING COMMENTS: temp blank included.

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-1688

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/24/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 5.5 °C - 0.3 °C (CF) = 5.2 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, March 25, 2014 11:26 AM
To: Stephen Nowak
Cc: Costamagna, Daniel G; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Re: Pechiney / 106270030 - 14-03-1688 - Sample Receipt Confirmation

Please change sample ID #928 to #934. I inadvertently named this sample incorrectly.

Sent from my iPhone

On Mar 25, 2014, at 11:11 AM, "Stephen Nowak" <snowak@calscience.com> wrote:

Stephen Nowak
Project Manager

<image001.jpg>
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com

<image002.jpg>

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<14-03-1688_sample_receipt.pdf>

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-1689

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/26/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-03-1689

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-1689 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/24/14. They were assigned to Work Order 14-03-1689.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-1689
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	03/24/14 16:27
		Number of Containers:	1
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#935	14-03-1689-1	03/24/14 14:51	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1689
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	03/24/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#935 (14-03-1689-1)						
Arsenic	1.14		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	76.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.411		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.56		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	9.53		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	5.05		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.09		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	27.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	33.4		1.00	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#935	**14-03-1689-1-A**	**03/24/14 14:51**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 18:09**	**140325B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	79	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-839**	**N/A**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 16:36**	**140325B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#935	**14-03-1689-1-A**	**03/24/14 14:51**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:27**	**140324L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.14	0.750	1.00	
Barium	76.7	0.500	1.00	
Beryllium	0.411	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	12.6	0.250	1.00	
Cobalt	7.56	0.250	1.00	
Copper	9.53	0.500	1.00	
Lead	5.05	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	8.09	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	27.6	0.250	1.00	
Zinc	33.4	1.00	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18195**	**N/A**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:25**	**140324L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#935	**14-03-1689-1-A**	**03/24/14 14:51**	**Solid**	**Mercury**	**03/25/14**	**03/25/14 15:34**	**140325L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Method Blank	**099-16-272-118**	**N/A**	**Solid**	**Mercury**	**03/25/14**	**03/25/14 14:36**	**140325L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#935	**14-03-1689-1-A**	**03/24/14 14:51**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 03:29**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

Method Blank	**099-02-003-219**	**N/A**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 02:32**	**140324L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1717-1	**Sample**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 17:38**	**140325S01**
14-03-1717-1	**Matrix Spike**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 17:07**	**140325S01**
14-03-1717-1	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 17:23**	**140325S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	1009	400.0	994.2	0	909.9	0	64-130	9	0-15	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#935	**Sample**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:27**	**140324S05**
#935	**Matrix Spike**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:28**	**140324S05**
#935	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:29**	**140324S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.985	28	5.944	24	50-115	16	0-20	3
Arsenic	1.139	25.00	25.01	95	24.78	95	75-125	1	0-20	
Barium	76.68	25.00	117.2	162	117.9	165	75-125	1	0-20	3
Beryllium	0.4107	25.00	25.26	99	25.64	101	75-125	1	0-20	
Cadmium	ND	25.00	24.56	98	24.88	100	75-125	1	0-20	
Chromium	12.57	25.00	37.13	98	36.86	97	75-125	1	0-20	
Cobalt	7.557	25.00	33.59	104	33.61	104	75-125	0	0-20	
Copper	9.532	25.00	37.01	110	36.80	109	75-125	1	0-20	
Lead	5.046	25.00	30.64	102	31.16	104	75-125	2	0-20	
Molybdenum	ND	25.00	22.26	89	22.23	89	75-125	0	0-20	
Nickel	8.095	25.00	33.30	101	32.86	99	75-125	1	0-20	
Selenium	ND	25.00	20.74	83	22.08	88	75-125	6	0-20	
Silver	ND	12.50	12.09	97	12.23	98	75-125	1	0-20	
Thallium	ND	25.00	21.47	86	21.92	88	75-125	2	0-20	
Vanadium	27.62	25.00	53.10	102	52.17	98	75-125	2	0-20	
Zinc	33.37	25.00	60.92	110	60.81	110	75-125	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1629-3	**Sample**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:23**	**140325S02**
14-03-1629-3	**Matrix Spike**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:25**	**140325S02**
14-03-1629-3	**Matrix Spike Duplicate**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:27**	**140325S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.08457	0.8350	0.8224	88	0.8428	91	76-136	2	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#935	**Sample**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 03:29**	**140324S10**
#935	**Matrix Spike**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 02:51**	**140324S10**
#935	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 03:10**	**140324S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	99.56	100	97.32	97	50-135	2	0-25	
Aroclor-1260	ND	100.0	104.2	104	98.76	99	50-135	5	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-839	**LCS**	**Solid**	**GC 48**	**03/25/14**	**03/25/14 16:52**	**140325B01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	347.2	87	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18195	**LCS**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:26**	**140324L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.78	107	80-120	73-127	
Arsenic	25.00	25.13	101	80-120	73-127	
Barium	25.00	25.85	103	80-120	73-127	
Beryllium	25.00	25.42	102	80-120	73-127	
Cadmium	25.00	26.83	107	80-120	73-127	
Chromium	25.00	25.79	103	80-120	73-127	
Cobalt	25.00	29.07	116	80-120	73-127	
Copper	25.00	28.31	113	80-120	73-127	
Lead	25.00	27.88	112	80-120	73-127	
Molybdenum	25.00	27.02	108	80-120	73-127	
Nickel	25.00	27.74	111	80-120	73-127	
Selenium	25.00	24.24	97	80-120	73-127	
Silver	12.50	13.12	105	80-120	73-127	
Thallium	25.00	27.61	110	80-120	73-127	
Vanadium	25.00	25.45	102	80-120	73-127	
Zinc	25.00	27.55	110	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-118	**LCS**	**Solid**	**Mercury**	**03/25/14**	**03/25/14 14:39**	**140325L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8758	105	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/24/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1689
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-219	**LCS**	**Solid**	**GC 31**	**03/24/14**	**03/26/14 02:13**	**140324L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	102.6	103	50-135	
Aroclor-1260	100.0	101.0	101	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-1689

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	598	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-1689

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB. 31295

PROJECT NAME: Pechiney			DATE: 3-24-14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC Irvine	REPORTING REQUIREMENTS: 14-03-1689
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES

DATE	TIME	SAMPLE NUMBER	EPA 8082-PCBs	EPA 8015-TPH	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
3-24-14	1451	#929	X	X	X	4oz glass jar	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	3/24/14	1500	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	3/24/14	1500
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY:	3/24/14	1520	SIGNATURE: PRINTED NAME: Adam Petersen COMPANY: CEC	3/24/14	1520
SIGNATURE: PRINTED NAME: Adam Petersen COMPANY: CEC	3/24/14	1627	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CEC	3/24/14	16:27

TOTAL NUMBER OF CONTAINERS: 1

SAMPLING COMMENTS:

Temp Blank Included

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-1689

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/24/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 5.5 °C - 0.3 °C (CF) = 5.2 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** SMG

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** SMG

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, March 25, 2014 11:27 AM
To: Stephen Nowak
Cc: Costamagna, Daniel G; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Re: Pechiney / 0106270030 - 14-03-1689 - Sample Receipt Confirmation

Please change #929 to #935. This one was also named incorrectly, thanks.

Sent from my iPhone

On Mar 25, 2014, at 11:11 AM, "Stephen Nowak" <snowak@calscience.com> wrote:

Stephen Nowak
Project Manager

<image001.jpg>
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com

<image002.jpg>

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<14-03-1689_sample_receipt.pdf>

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-1770

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Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 03/27/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-03-1770

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Work Order Narrative

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/25/14. They were assigned to Work Order 14-03-1770.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-1770
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	03/25/14 16:03
		Number of Containers:	10
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
648-IV-P/S-CS-001	14-03-1770-1	03/25/14 08:55	1	Other
648-IV-P/S-CS-002	14-03-1770-2	03/25/14 09:01	1	Other
648-IV-P/S-CS-003	14-03-1770-3	03/25/14 09:07	1	Other
#932	14-03-1770-4	03/25/14 10:15	1	Solid
#933	14-03-1770-5	03/25/14 10:17	1	Solid
648-IV-P/S-O-001	14-03-1770-6	03/25/14 10:57	1	Other
658-IV-P/S-CS-001	14-03-1770-7	03/25/14 10:59	1	Other
658-IV-P/S-SS-001	14-03-1770-8	03/25/14 11:01	1	Solid
658-IV-P/S-CS-002	14-03-1770-9	03/25/14 11:10	1	Other
642-IV-P-SS-007	14-03-1770-10	03/25/14 13:15	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-03-1770
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	03/25/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
648-IV-P/S-O-001 (14-03-1770-6)						
Arsenic	7.02		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	83.3		0.505	mg/kg	EPA 6010B	EPA 3050B
Cadmium	5.13		0.505	mg/kg	EPA 6010B	EPA 3050B
Chromium	113		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	14.9		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	176		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	367		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	2.42		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	200		0.253	mg/kg	EPA 6010B	EPA 3050B
Silver	0.268		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	9.81		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	742		1.01	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.128		0.0833	mg/kg	EPA 7471A	EPA 7471A Total
C19-C20	150		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	190		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	200		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	320		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	300		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	240		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	96		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	67		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1600		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1254	800		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	610		50	ug/kg	EPA 8082	EPA 3540C
658-IV-P/S-SS-001 (14-03-1770-8)						
C17-C18	43		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	69		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	61		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	50		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	52		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	51		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	53		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	420		25	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
648-IV-P/S-O-001	**14-03-1770-6-A**	**03/25/14 10:57**	**Other**	**GC 48**	**03/25/14**	**03/26/14 16:52**	**140325B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	ND	25	5.00	
C11-C12	ND	25	5.00	
C13-C14	ND	25	5.00	
C15-C16	ND	25	5.00	
C17-C18	ND	25	5.00	
C19-C20	150	25	5.00	
C21-C22	190	25	5.00	
C23-C24	200	25	5.00	
C25-C28	320	25	5.00	
C29-C32	300	25	5.00	
C33-C36	240	25	5.00	
C37-C40	96	25	5.00	
C41-C44	67	25	5.00	
C6-C44 Total	1600	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
658-IV-P/S-SS-001	**14-03-1770-8-A**	**03/25/14 11:01**	**Solid**	**GC 48**	**03/25/14**	**03/26/14 17:07**	**140325B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.05	
C7	ND	25	5.05	
C8	ND	25	5.05	
C9-C10	ND	25	5.05	
C11-C12	ND	25	5.05	
C13-C14	ND	25	5.05	
C15-C16	ND	25	5.05	
C17-C18	43	25	5.05	
C19-C20	69	25	5.05	
C21-C22	61	25	5.05	
C23-C24	50	25	5.05	
C25-C28	52	25	5.05	
C29-C32	51	25	5.05	
C33-C36	53	25	5.05	
C37-C40	ND	25	5.05	
C41-C44	ND	25	5.05	
C6-C44 Total	420	25	5.05	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	103	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-841**	**N/A**	**Solid**	**GC 48**	**03/25/14**	**03/26/14 12:25**	**140325B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	79	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
648-IV-P/S-O-001	**14-03-1770-6-A**	**03/25/14 10:57**	**Other**	**ICP 7300**	**03/24/14**	**03/26/14 19:14**	**140324L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	7.02	0.758	1.01	
Barium	83.3	0.505	1.01	
Beryllium	ND	0.253	1.01	
Cadmium	5.13	0.505	1.01	
Chromium	113	0.253	1.01	
Cobalt	14.9	0.253	1.01	
Copper	176	0.505	1.01	
Lead	367	0.505	1.01	
Molybdenum	2.42	0.253	1.01	
Nickel	200	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	0.268	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	9.81	0.253	1.01	
Zinc	742	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18195**	**N/A**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:25**	**140324L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
648-IV-P/S-O-001	**14-03-1770-6-A**	**03/25/14 10:57**	**Other**	**Mercury**	**03/25/14**	**03/26/14 12:26**	**140325L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.128	0.0833	1.00	

Method Blank	**099-16-272-119**	**N/A**	**Solid**	**Mercury**	**03/25/14**	**03/25/14 14:16**	**140325L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
648-IV-P/S-CS-001	**14-03-1770-1-A**	**03/25/14 08:55**	**Other**	**GC 31**	**03/25/14**	**03/27/14 08:47**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

648-IV-P/S-CS-002	**14-03-1770-2-A**	**03/25/14 09:01**	**Other**	**GC 31**	**03/25/14**	**03/27/14 09:07**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
648-IV-P/S-CS-003	**14-03-1770-3-A**	**03/25/14 09:07**	**Other**	**GC 31**	**03/25/14**	**03/27/14 09:26**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

#932	**14-03-1770-4-A**	**03/25/14 10:15**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 09:45**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	ND	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#933	**14-03-1770-5-A**	**03/25/14 10:17**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 10:04**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

648-IV-P/S-O-001	**14-03-1770-6-A**	**03/25/14 10:57**	**Other**	**GC 31**	**03/25/14**	**03/27/14 17:05**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	800	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	610	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	180	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
658-IV-P/S-CS-001	**14-03-1770-7-A**	**03/25/14 10:59**	**Other**	**GC 31**	**03/25/14**	**03/27/14 16:45**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	80	50-130	

658-IV-P/S-SS-001	**14-03-1770-8-A**	**03/25/14 11:01**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 11:01**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	133	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	83	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
658-IV-P/S-CS-002	**14-03-1770-9-A**	**03/25/14 11:10**	**Other**	**GC 31**	**03/25/14**	**03/27/14 11:20**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	76	50-130	

642-IV-P-SS-007	**14-03-1770-10-A**	**03/25/14 13:15**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 11:39**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-220**	**N/A**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 08:09**	**140325L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1695-11	**Sample**	**Solid**	**GC 48**	**03/25/14**	**03/26/14 16:21**	**140325S12**
14-03-1695-11	**Matrix Spike**	**Solid**	**GC 48**	**03/25/14**	**03/26/14 12:56**	**140325S12**
14-03-1695-11	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**03/25/14**	**03/26/14 13:12**	**140325S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	8.074	400.0	317.4	77	313.9	76	64-130	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1689-1	**Sample**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:27**	**140324S05**
14-03-1689-1	**Matrix Spike**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:28**	**140324S05**
14-03-1689-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:29**	**140324S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.985	28	5.944	24	50-115	16	0-20	3
Arsenic	1.139	25.00	25.01	95	24.78	95	75-125	1	0-20	
Barium	76.68	25.00	117.2	162	117.9	165	75-125	1	0-20	3
Beryllium	0.4107	25.00	25.26	99	25.64	101	75-125	1	0-20	
Cadmium	ND	25.00	24.56	98	24.88	100	75-125	1	0-20	
Chromium	12.57	25.00	37.13	98	36.86	97	75-125	1	0-20	
Cobalt	7.557	25.00	33.59	104	33.61	104	75-125	0	0-20	
Copper	9.532	25.00	37.01	110	36.80	109	75-125	1	0-20	
Lead	5.046	25.00	30.64	102	31.16	104	75-125	2	0-20	
Molybdenum	ND	25.00	22.26	89	22.23	89	75-125	0	0-20	
Nickel	8.095	25.00	33.30	101	32.86	99	75-125	1	0-20	
Selenium	ND	25.00	20.74	83	22.08	88	75-125	6	0-20	
Silver	ND	12.50	12.09	97	12.23	98	75-125	1	0-20	
Thallium	ND	25.00	21.47	86	21.92	88	75-125	2	0-20	
Vanadium	27.62	25.00	53.10	102	52.17	98	75-125	2	0-20	
Zinc	33.37	25.00	60.92	110	60.81	110	75-125	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1535-1	**Sample**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:41**	**140325S03**
14-03-1535-1	**Matrix Spike**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:43**	**140325S03**
14-03-1535-1	**Matrix Spike Duplicate**	**Sediment**	**Mercury**	**03/25/14**	**03/25/14 14:45**	**140325S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.09524	0.8350	0.8746	93	0.8809	94	76-136	1	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
642-IV-P-SS-007	**Sample**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 11:39**	**140325S10**
642-IV-P-SS-007	**Matrix Spike**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 11:58**	**140325S10**
642-IV-P-SS-007	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 12:19**	**140325S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	89.85	90	83.89	84	50-135	7	0-25	
Aroclor-1260	ND	100.0	87.48	87	84.29	84	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-841	**LCS**	**Solid**	**GC 48**	**03/25/14**	**03/26/14 12:40**	**140325B12**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	319.2	80	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18195	**LCS**	**Solid**	**ICP 7300**	**03/24/14**	**03/24/14 21:26**	**140324L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.78	107	80-120	73-127	
Arsenic	25.00	25.13	101	80-120	73-127	
Barium	25.00	25.85	103	80-120	73-127	
Beryllium	25.00	25.42	102	80-120	73-127	
Cadmium	25.00	26.83	107	80-120	73-127	
Chromium	25.00	25.79	103	80-120	73-127	
Cobalt	25.00	29.07	116	80-120	73-127	
Copper	25.00	28.31	113	80-120	73-127	
Lead	25.00	27.88	112	80-120	73-127	
Molybdenum	25.00	27.02	108	80-120	73-127	
Nickel	25.00	27.74	111	80-120	73-127	
Selenium	25.00	24.24	97	80-120	73-127	
Silver	12.50	13.12	105	80-120	73-127	
Thallium	25.00	27.61	110	80-120	73-127	
Vanadium	25.00	25.45	102	80-120	73-127	
Zinc	25.00	27.55	110	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-119	**LCS**	**Solid**	**Mercury**	**03/25/14**	**03/25/14 14:18**	**140325L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8591	103	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/25/14
121 Innovation Drive, Suite 200		Work Order:	14-03-1770
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-220	**LCS**	**Solid**	**GC 31**	**03/25/14**	**03/27/14 07:50**	**140325L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	96.56	97	50-135	
Aroclor-1260	100.0	88.64	89	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-1770

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-1770

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31296

PROJECT NAME: PECHINEY		DATE: 3/25/14	PAGE 1 OF
PROJECT NUMBER: 106270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 14-03-1770
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEV CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCB's	8015 TPH	TITLE 22 METALS	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3/25/14	0855	648-IV-P/S-CS-001	X			4oz JAR	O			X		1	
2		0901	648-IV-P/S-CS-002	X				O			X		1	
3		0907	648-IV-P/S-CS-003	X				O			X		1	
4		1015	# 932	X				S			X		1	
5		1017	# 933	X				S			X		1	
6		1057	648-IV-P/S-O-001	X	X	X		O			X		1	
7		1059	658-IV-P/S-CS-001	X				O			X		1	
8		1101	658-IV-P/S-SS-001	X	X			S			X		1	
9		1110	658-IV-P/S-CS-002	X				O			X		1	
10		1315	642-IV-P-SS-007	X				S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: KEV CURNUTT COMPANY: AMEC	3/25/14	1400	SIGNATURE: [signature] PRINTED NAME: STEPHEN HUNG COMPANY: AMEC	3/25/14	1400
SIGNATURE: [signature] PRINTED NAME: STEPHEN HUNG COMPANY: AMEC	3/25/14	1505	SIGNATURE: [signature] PRINTED NAME: ARTHUR YOUNG COMPANY: CALSCIENCE	3/25/14	1505
SIGNATURE: [signature] PRINTED NAME: ARTHUR YOUNG COMPANY: CALSCIENCE	3/25/14	1603	SIGNATURE: [signature] PRINTED NAME: PRECY SOMIANO COMPANY: CAL	3/25/14	1603

TOTAL NUMBER OF CONTAINERS: 10

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-1770

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KMEC

DATE: 03/25/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.0 °C - 0.3 °C (CF) = 1.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
* ☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☐	☑	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na_2** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na_2** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na_2** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na_2:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 802

*(2 to 10) Collection date on label, 3/25/14

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-1770

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired – list sample ID(s) and test
- ☐ Insufficient quantities for analysis – list test
- ☐ Improper container(s) used – list test
- ☐ Improper preservative used – list test
- ☐ No preservative noted on COC or label – list test & notify lab
- ☐ Sample labels illegible – note test/container type
- ☑ Sample label(s) do not match COC – Note in comments
  - ☐ Sample ID
  - ☑ Date and/or Time Collected
  - ☐ Project Information
  - ☐ # of Container(s)
  - ☐ Analysis
- ☐ Sample container(s) compromised – Note in comments
  - ☐ Water present in sample container
  - ☐ Broken
- ☐ Sample container(s) not labeled
- ☐ Air sample container(s) compromised – Note in comments
  - ☐ Flat
  - ☐ Very low in volume
  - ☐ Leaking (Not transferred - duplicate bag submitted)
  - ☐ Leaking (transferred into Calscience Tedlar® Bag*)
  - ☐ Leaking (transferred into Client's Tedlar® Bag*)
- ☐ Other: _____

(-6) Collection time per label, 1047.

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: 836 03/25/14

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-2179

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/02/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-03-2179

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-2179 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/31/14. They were assigned to Work Order 14-03-2179.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-2179
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	03/31/14 17:52
		Number of Containers:	19
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#936	14-03-2179-1	03/31/14 10:33	1	Solid
#937	14-03-2179-2	03/31/14 10:23	1	Solid
#938	14-03-2179-3	03/31/14 10:16	1	Solid
#939	14-03-2179-4	03/31/14 10:12	1	Solid
#940	14-03-2179-5	03/31/14 10:43	1	Solid
#941	14-03-2179-6	03/31/14 10:48	1	Solid
#942	14-03-2179-7	03/31/14 10:49	1	Solid
#943	14-03-2179-8	03/31/14 10:51	1	Solid
#944	14-03-2179-9	03/31/14 10:52	1	Solid
#945	14-03-2179-10	03/31/14 10:56	1	Solid
#946	14-03-2179-11	03/31/14 10:59	1	Solid
#947	14-03-2179-12	03/31/14 11:02	1	Solid
#948	14-03-2179-13	03/31/14 11:05	1	Solid
#949	14-03-2179-14	03/31/14 13:30	1	Solid
676-IV-R/R-SS-001	14-03-2179-15	03/31/14 13:41	1	Solid
676-IV-R/R-SS-002	14-03-2179-16	03/31/14 13:43	1	Solid
676-IV-R/R-SS-003	14-03-2179-17	03/31/14 13:44	1	Solid
676-IV-R/R-SS-004	14-03-2179-18	03/31/14 13:46	1	Solid
648-IV-P/S-SS-001	14-03-2179-19	03/31/14 13:55	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-2179
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	03/31/14
Attn:	Linda Conlan		Page 1 of 2

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#936 (14-03-2179-1)						
Aroclor-1248	820		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	150		50	ug/kg	EPA 8082	EPA 3540C
#937 (14-03-2179-2)						
Aroclor-1248	450		51	ug/kg	EPA 8082	EPA 3540C
#938 (14-03-2179-3)						
Aroclor-1248	830		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	69		50	ug/kg	EPA 8082	EPA 3540C
#939 (14-03-2179-4)						
Aroclor-1248	760		49	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	72		49	ug/kg	EPA 8082	EPA 3540C
#940 (14-03-2179-5)						
Aroclor-1248	670		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	71		50	ug/kg	EPA 8082	EPA 3540C
#941 (14-03-2179-6)						
Aroclor-1248	92		50	ug/kg	EPA 8082	EPA 3540C
#942 (14-03-2179-7)						
Aroclor-1248	170		50	ug/kg	EPA 8082	EPA 3540C
#943 (14-03-2179-8)						
Aroclor-1248	420		50	ug/kg	EPA 8082	EPA 3540C
#946 (14-03-2179-11)						
Aroclor-1248	290		50	ug/kg	EPA 8082	EPA 3540C
#947 (14-03-2179-12)						
Aroclor-1248	140		51	ug/kg	EPA 8082	EPA 3540C
#948 (14-03-2179-13)						
Aroclor-1248	310		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	61		50	ug/kg	EPA 8082	EPA 3540C
#949 (14-03-2179-14)						
Barium	33.0		0.490	mg/kg	EPA 6010B	EPA 3050B
Chromium	6.89		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	0.896		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	5.62		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	7.47		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	1.72		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	16.1		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	9.18		0.980	mg/kg	EPA 6010B	EPA 3050B
676-IV-R/R-SS-004 (14-03-2179-18)						
C6-C44 Total	9.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-03-2179
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	03/31/14
Attn:	Linda Conlan		Page 2 of 2

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#949	**14-03-2179-14-A**	**03/31/14 13:30**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 15:55**	**140401B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
676-IV-R/R-SS-001	**14-03-2179-15-A**	**03/31/14 13:41**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 16:10**	**140401B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
676-IV-R/R-SS-002	**14-03-2179-16-A**	**03/31/14 13:43**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 16:26**	**140401B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	68	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
676-IV-R/R-SS-003	**14-03-2179-17-A**	**03/31/14 13:44**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 16:42**	**140401B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	ND	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
676-IV-R/R-SS-004	**14-03-2179-18-A**	**03/31/14 13:46**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 16:58**	**140401B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	9.2	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	76	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-846**	**N/A**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 14:52**	**140401B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#949	**14-03-2179-14-A**	**03/31/14 13:30**	**Solid**	**ICP 7300**	**03/31/14**	**04/01/14 16:34**	**140331L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	ND	0.735	0.980	
Barium	33.0	0.490	0.980	
Beryllium	ND	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	6.89	0.245	0.980	
Cobalt	0.896	0.245	0.980	
Copper	5.62	0.490	0.980	
Lead	7.47	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	1.72	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	16.1	0.245	0.980	
Zinc	9.18	0.980	0.980	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18220**	**N/A**	**Solid**	**ICP 7300**	**03/31/14**	**03/31/14 23:54**	**140331L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#949	**14-03-2179-14-A**	**03/31/14 13:30**	**Solid**	**Mercury**	**04/01/14**	**04/01/14 13:47**	**140401L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Method Blank	**099-16-272-138**	**N/A**	**Solid**	**ICP 7300**	**04/01/14**	**04/01/14 11:17**	**140401L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#936	**14-03-2179-1-A**	**03/31/14 10:33**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 17:40**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	820	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	150	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

#937	**14-03-2179-2-A**	**03/31/14 10:23**	**Solid**	**GC 31**	**03/31/14**	**04/02/14 11:05**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	450	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#938	**14-03-2179-3-A**	**03/31/14 10:16**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 18:18**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	830	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	69	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

#939	**14-03-2179-4-A**	**03/31/14 10:12**	**Solid**	**GC 31**	**03/31/14**	**04/02/14 11:24**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	760	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	72	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#940	**14-03-2179-5-A**	**03/31/14 10:43**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 18:56**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	670	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	71	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

#941	**14-03-2179-6-A**	**03/31/14 10:48**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 19:15**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	92	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#942	**14-03-2179-7-A**	**03/31/14 10:49**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 19:34**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	170	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

#943	**14-03-2179-8-A**	**03/31/14 10:51**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 19:53**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	420	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#944	**14-03-2179-9-A**	**03/31/14 10:52**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 20:13**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	ND	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

#945	**14-03-2179-10-A**	**03/31/14 10:56**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 20:32**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#946	**14-03-2179-11-A**	**03/31/14 10:59**	**Solid**	**GC 31**	**03/31/14**	**04/02/14 11:43**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	290	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

#947	**14-03-2179-12-A**	**03/31/14 11:02**	**Solid**	**GC 31**	**03/31/14**	**04/02/14 12:02**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	140	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#948	**14-03-2179-13-A**	**03/31/14 11:05**	**Solid**	**GC 31**	**03/31/14**	**04/02/14 12:21**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	310	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	61	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

#949	**14-03-2179-14-A**	**03/31/14 13:30**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 21:48**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
676-IV-R/R-SS-001	**14-03-2179-15-A**	**03/31/14 13:41**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 22:07**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

676-IV-R/R-SS-002	**14-03-2179-16-A**	**03/31/14 13:43**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 22:26**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
676-IV-R/R-SS-003	**14-03-2179-17-A**	**03/31/14 13:44**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 22:45**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

676-IV-R/R-SS-004	**14-03-2179-18-A**	**03/31/14 13:46**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 23:04**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
648-IV-P/S-SS-001	**14-03-2179-19-A**	**03/31/14 13:55**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 23:23**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	ND	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

Method Blank	**099-02-003-222**	**N/A**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 16:04**	**140331L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#949	**Sample**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 15:55**	**140401S03**
#949	**Matrix Spike**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 15:23**	**140401S03**
#949	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 15:39**	**140401S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	391.4	98	378.8	95	64-130	3	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-2112-1	**Sample**	**Solid**	**ICP 7300**	**03/31/14**	**04/01/14 00:01**	**140331S02**
14-03-2112-1	**Matrix Spike**	**Solid**	**ICP 7300**	**03/31/14**	**04/01/14 00:03**	**140331S02**
14-03-2112-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**03/31/14**	**04/01/14 00:04**	**140331S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	17.68	71	18.53	74	50-115	5	0-20	
Arsenic	1.088	25.00	26.02	100	27.85	107	75-125	7	0-20	
Barium	13.75	25.00	38.73	100	41.68	112	75-125	7	0-20	
Beryllium	ND	25.00	26.14	105	26.70	107	75-125	2	0-20	
Cadmium	ND	25.00	25.63	103	26.30	105	75-125	3	0-20	
Chromium	3.704	25.00	30.20	106	30.55	107	75-125	1	0-20	
Cobalt	1.211	25.00	28.37	109	29.50	113	75-125	4	0-20	
Copper	0.9397	25.00	26.95	104	27.68	107	75-125	3	0-20	
Lead	1.278	25.00	28.92	111	29.97	115	75-125	4	0-20	
Molybdenum	ND	25.00	26.48	106	27.29	109	75-125	3	0-20	
Nickel	1.155	25.00	27.87	107	28.78	110	75-125	3	0-20	
Selenium	ND	25.00	23.81	95	24.96	100	75-125	5	0-20	
Silver	ND	12.50	12.70	102	12.97	104	75-125	2	0-20	
Thallium	ND	25.00	24.99	100	26.41	106	75-125	6	0-20	
Vanadium	8.309	25.00	34.15	103	34.37	104	75-125	1	0-20	
Zinc	7.055	25.00	35.38	113	35.48	114	75-125	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-2126-10	**Sample**	**Solid**	**Mercury**	**04/01/14**	**04/01/14 12:28**	**140401S01**
14-03-2126-10	**Matrix Spike**	**Solid**	**ICP 7300**	**04/01/14**	**04/01/14 12:30**	**140401S01**
14-03-2126-10	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/01/14**	**04/01/14 12:32**	**140401S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.1430	0.8350	0.7395	71	0.7294	70	71-137	1	0-14	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#936	**Sample**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 17:40**	**140331S20**
#936	**Matrix Spike**	**Solid**	**GC 31**	**03/31/14**	**04/02/14 00:21**	**140331S20**
#936	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**03/31/14**	**04/02/14 00:40**	**140331S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	253.4	253	254.3	254	50-135	0	0-25	3
Aroclor-1260	152.1	100.0	227.0	75	275.9	124	50-135	19	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-846	**LCS**	**Solid**	**GC 48**	**04/01/14**	**04/01/14 15:07**	**140401B03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	370.2	93	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18220	**LCS**	**Solid**	**ICP 7300**	**03/31/14**	**04/01/14 00:00**	**140331L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	27.26	109	80-120	73-127	
Arsenic	25.00	26.72	107	80-120	73-127	
Barium	25.00	27.23	109	80-120	73-127	
Beryllium	25.00	26.65	107	80-120	73-127	
Cadmium	25.00	27.57	110	80-120	73-127	
Chromium	25.00	28.08	112	80-120	73-127	
Cobalt	25.00	29.45	118	80-120	73-127	
Copper	25.00	26.96	108	80-120	73-127	
Lead	25.00	28.43	114	80-120	73-127	
Molybdenum	25.00	27.91	112	80-120	73-127	
Nickel	25.00	29.29	117	80-120	73-127	
Selenium	25.00	24.64	99	80-120	73-127	
Silver	12.50	13.76	110	80-120	73-127	
Thallium	25.00	27.51	110	80-120	73-127	
Vanadium	25.00	26.62	106	80-120	73-127	
Zinc	25.00	27.32	109	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-138	**LCS**	**Solid**	**ICP 7300**	**04/01/14**	**04/01/14 11:19**	**140401L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8985	108	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	03/31/14
121 Innovation Drive, Suite 200		Work Order:	14-03-2179
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-222	**LCS**	**Solid**	**GC 31**	**03/31/14**	**04/01/14 15:45**	**140331L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	77.04	77	50-135	
Aroclor-1260	100.0	71.58	72	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-2179

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-2179

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31298

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 3-31-14 PAGE 1 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:	Irvine office	14-03-2179
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	EPA 8015	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	3-31-14	1033	#936	X			4oz glass jar	S			X		1	
2		1023	#937	X				S			X		1	
3		1016	#938	X				S			X		1	
4		1012	#939	X				S			X		1	
5		1043	#940	X				S			X		1	
6		1048	#941	X				S			X		1	
7		1049	#942	X				S			X		1	
8		1051	#943	X				S			X		1	
9		1052	#944	X				S			X		1	
10		1056	#945	X				S			X		1	
11		1059	#946	X				S			X		1	
12		1102	#947	X				S			X		1	
13		1105	#948	X				S			X		1	
14		1330	#949	X	X	X		S			X		1	
15		1341	676-IV-R/R-SS-001	X	X			S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	3/31/14	1439	SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: CEL	3/31/14	1439
SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: CEL	3/31/14	1752	SIGNATURE: PRINTED NAME: Noel Cruz COMPANY: CEL	3/31/14	1752
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS: temp blank included

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 31299

PROJECT NAME: Former Pechiney Cast Plate Facility		DATE: 3-31-14	PAGE 2 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC Irvine	REPORTING REQUIREMENTS: 2179
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	3-31-14	1343	676-IV-R/R-SS-002	X	X		S			X	~~X~~	1	
17		1344	676-IV-R/R-SS-003	X	X		S			X	~~X~~	1	
18		1346	676-IV-R/R-SS-004	X	X		S			X		1	
19		1355	648-IV-P/S-SS-001	X			S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	3/31/14	1439	SIGNATURE: PRINTED NAME: Amy Marquez COMPANY: CEL	3/31/14	1439
SIGNATURE: PRINTED NAME: Amy Marquez COMPANY: CEL	3/31/14	1752	SIGNATURE: PRINTED NAME: COMPANY: CEL	3/31/14	1752
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 4/19

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-2179

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 03/31/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 739

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 739

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 681

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 681

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0058

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/07/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-0058

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0058 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/01/14. They were assigned to Work Order 14-04-0058.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0058
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	04/01/14 16:30
		Number of Containers:	19
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
647-IV-P/S-CS-001	14-04-0058-1	04/01/14 08:45	1	Other
647-IV-P/S-CS-002	14-04-0058-2	04/01/14 08:50	1	Other
647-IV-P/S-CS-003	14-04-0058-3	04/01/14 08:57	1	Other
678-IV-P/S-CS-001	14-04-0058-4	04/01/14 09:02	1	Other
678-IV-P/S-CS-002	14-04-0058-5	04/01/14 09:08	1	Other
#950	14-04-0058-6	04/01/14 11:15	1	Solid
#951	14-04-0058-7	04/01/14 11:16	1	Solid
#952	14-04-0058-8	04/01/14 11:17	1	Solid
#953	14-04-0058-9	04/01/14 11:18	1	Solid
#954	14-04-0058-10	04/01/14 11:19	1	Solid
#955	14-04-0058-11	04/01/14 11:20	1	Solid
#956	14-04-0058-12	04/01/14 11:21	1	Solid
#957	14-04-0058-13	04/01/14 11:22	1	Solid
#958	14-04-0058-14	04/01/14 11:23	1	Solid
#959	14-04-0058-15	04/01/14 11:24	1	Solid
#960	14-04-0058-16	04/01/14 11:25	1	Solid
#961	14-04-0058-17	04/01/14 11:26	1	Solid
623-IIB-P/S-CS-001	14-04-0058-18	04/01/14 13:01	1	Other
623-IIB-P/S-CS-002	14-04-0058-19	04/01/14 13:12	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0058
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/01/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
647-IV-P/S-CS-002 (14-04-0058-2)						
Aroclor-1248	230		50	ug/kg	EPA 8082	EPA 3540C
678-IV-P/S-CS-001 (14-04-0058-4)						
Aroclor-1248	110		50	ug/kg	EPA 8082	EPA 3540C
#950 (14-04-0058-6)						
Aroclor-1248	1400000		250000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	69000		5000	ug/kg	EPA 8082	EPA 3540C
#951 (14-04-0058-7)						
Aroclor-1248	130000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	6000		5000	ug/kg	EPA 8082	EPA 3540C
#952 (14-04-0058-8)						
Aroclor-1248	2100000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	170000		50000	ug/kg	EPA 8082	EPA 3540C
#953 (14-04-0058-9)						
Aroclor-1248	2400		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	70		50	ug/kg	EPA 8082	EPA 3540C
#954 (14-04-0058-10)						
Aroclor-1248	270000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	13000		5000	ug/kg	EPA 8082	EPA 3540C
#955 (14-04-0058-11)						
Aroclor-1248	1300		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	88		50	ug/kg	EPA 8082	EPA 3540C
#956 (14-04-0058-12)						
Aroclor-1248	97		50	ug/kg	EPA 8082	EPA 3540C
#957 (14-04-0058-13)						
Aroclor-1248	840000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	25000		5000	ug/kg	EPA 8082	EPA 3540C
#958 (14-04-0058-14)						
Aroclor-1248	780		50	ug/kg	EPA 8082	EPA 3540C
#959 (14-04-0058-15)						
Aroclor-1248	940000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	30000		5000	ug/kg	EPA 8082	EPA 3540C
#960 (14-04-0058-16)						
Aroclor-1248	200000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	6400		5000	ug/kg	EPA 8082	EPA 3540C
#961 (14-04-0058-17)						
Aroclor-1248	64000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	5200		5000	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0058
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/01/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
623-IIB-P/S-CS-001 (14-04-0058-18)						
Aroclor-1248	63		50	ug/kg	EPA 8082	EPA 3540C
623-IIB-P/S-CS-002 (14-04-0058-19)						
Aroclor-1248	1600		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	340		250	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-CS-001	**14-04-0058-1-A**	**04/01/14 08:45**	**Other**	**GC 31**	**04/01/14**	**04/02/14 21:29**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

647-IV-P/S-CS-002	**14-04-0058-2-A**	**04/01/14 08:50**	**Other**	**GC 31**	**04/01/14**	**04/02/14 21:48**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	230	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-CS-003	**14-04-0058-3-A**	**04/01/14 08:57**	**Other**	**GC 31**	**04/01/14**	**04/02/14 22:07**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

678-IV-P/S-CS-001	**14-04-0058-4-A**	**04/01/14 09:02**	**Other**	**GC 31**	**04/01/14**	**04/02/14 22:26**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	110	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
678-IV-P/S-CS-002	**14-04-0058-5-A**	**04/01/14 09:08**	**Other**	**GC 31**	**04/01/14**	**04/02/14 22:45**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

#950	**14-04-0058-6-A**	**04/01/14 11:15**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 02:07**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	69000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	421	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#950	**14-04-0058-6-A**	**04/01/14 11:15**	**Solid**	**GC 31**	**04/01/14**	**04/07/14 10:41**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1400000	250000	5000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

#951	**14-04-0058-7-A**	**04/01/14 11:16**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 02:26**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	6000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	176	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

#951	**14-04-0058-7-A**	**04/01/14 11:16**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 23:54**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	130000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#952	**14-04-0058-8-A**	**04/01/14 11:17**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 00:13**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	170000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	1490	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

#952	**14-04-0058-8-A**	**04/01/14 11:17**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 16:47**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	2100000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#953	**14-04-0058-9-A**	**04/01/14 11:18**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 20:04**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	70	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

#953	**14-04-0058-9-A**	**04/01/14 11:18**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 15:27**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	2400	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	126	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#954	**14-04-0058-10-A**	**04/01/14 11:19**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 03:04**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	13000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	160	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	82	50-130	

#954	**14-04-0058-10-A**	**04/01/14 11:19**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 00:32**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	270000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	130	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 8 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#955	**14-04-0058-11-A**	**04/01/14 11:20**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 20:24**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	88	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

#955	**14-04-0058-11-A**	**04/01/14 11:20**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 23:15**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1300	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 9 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#956	**14-04-0058-12-A**	**04/01/14 11:21**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 20:43**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	97	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

#957	**14-04-0058-13-A**	**04/01/14 11:22**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 21:02**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	25000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	180	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	127	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 10 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#957	**14-04-0058-13-A**	**04/01/14 11:22**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 00:51**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	840000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	780	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#958	**14-04-0058-14-A**	**04/01/14 11:23**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 21:21**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	780	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 11 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#959	**14-04-0058-15-A**	**04/01/14 11:24**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 21:40**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	30000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	194	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	122	50-130	

#959	**14-04-0058-15-A**	**04/01/14 11:24**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 19:42**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	940000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 12 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#960	**14-04-0058-16-A**	**04/01/14 11:25**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 21:59**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	6400	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	233	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	116	50-130	

#960	**14-04-0058-16-A**	**04/01/14 11:25**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 14:30**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	200000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 13 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#961	**14-04-0058-17-A**	**04/01/14 11:26**	**Solid**	**GC 31**	**04/01/14**	**04/03/14 22:18**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1248	64000	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	5200	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

623-IIB-P/S-CS-001	**14-04-0058-18-A**	**04/01/14 13:01**	**Other**	**GC 31**	**04/01/14**	**04/03/14 22:37**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	63	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 14 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
623-IIB-P/S-CS-002	**14-04-0058-19-A**	**04/01/14 13:12**	**Other**	**GC 31**	**04/01/14**	**04/04/14 14:11**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	250	5.00	
Aroclor-1221	ND	250	5.00	
Aroclor-1232	ND	250	5.00	
Aroclor-1242	ND	250	5.00	
Aroclor-1248	1600	250	5.00	
Aroclor-1254	ND	250	5.00	
Aroclor-1260	340	250	5.00	
Aroclor-1262	ND	250	5.00	
Aroclor-1268	ND	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	121	50-130	

Method Blank	**099-02-003-223**	**N/A**	**Solid**	**GC 31**	**04/01/14**	**04/02/14 21:10**	**140401L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#951	**Sample**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 02:26**	**140401S15**
#951	**Matrix Spike**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 14:49**	**140401S15**
#951	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/01/14**	**04/04/14 15:08**	**140401S15**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	10000	37690	377	51580	516	50-135	31	0-25	3,4
Aroclor-1260	6018	10000	5860	0	7090	11	50-135	19	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-223	**LCS**	**Solid**	**GC 31**	**04/01/14**	**04/02/14 20:50**	**140401L15**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	83.44	83	50-135	
Aroclor-1260	100.0	87.96	88	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0058

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0058

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31300

PROJECT NAME: PECHINEY			DATE: 4/01/14 PAGE 1 OF 2
PROJECT NUMBER: 10627 0030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:	IRVINE	14-04-0058
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES: 8082 PCBs

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/1/14	0845	647-IV-P/S-CS-001	X	4oz JAR	O			X		1	
2		0850	647-IV-P/S-CS-002	X		O			X		1	
3		0857	647-IV-P/S-CS-003	X		O			X		1	
4		0902	678-IV-P/S-CS-001	X		O			X		1	
5		0908	678-IV-P/S-CS-002	X		O			X		1	
6		1115	#950	X		S			X		1	
7		1116	#951	X		S			X		1	
8		1117	#952	X		S			X		1	
9		1118	#953	X		S			X		1	
10		1119	#954	X		S			X		1	
11		1120	#955	X		S			X		1	
12		1121	#956	X		S			X		1	
13		1122	#957	X		S			X		1	
14		1123	#958	X		S			X		1	
15	4/1/14	1124	#959	X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	4/1/14	1448	SIGNATURE: [signature]	4/1/14	1448
PRINTED NAME: KEN CURNUTT			PRINTED NAME: ALEX MARQUEZ		
COMPANY: AMEC			COMPANY: CEL		
SIGNATURE: [signature]	4/1/14	1630	SIGNATURE: [signature]	4/1/14	1630
PRINTED NAME: ALEX MARQUEZ			PRINTED NAME: Noel Cruise		
COMPANY: CEL			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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CHAIN-OF-CUSTODY RECORD

NB 31301

PROJECT NAME: PECHINEY			DATE: 4/1/14 PAGE 2 OF 2
PROJECT NUMBER: 10627 0030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 0058
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES: 8082 PCBs

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	4/1/14	1125	#960	X	4oz JAR	S			X		1	
17	↑	1126	#961	X	↑	S			X		1	
18	↓	1301	623-#6-P/S-CS-001	X	↓	O			X		1	
19	4/1/14	1312	623-#6-P/S-CS-002	X	4oz JAR	O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: KEN CURNUTT COMPANY: AMEC	4/1/14	1448	SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/1/14	1448
SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/1/14	1630	SIGNATURE: [signature] PRINTED NAME: NOEL CRUZ COMPANY: CEL	4/1/14	1630
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0058

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/1/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 862

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 862

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0058

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/09/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Pechiney / 106270030
Work Order Number: 14-04-0058

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Work Order Narrative

Work Order: 14-04-0058 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/01/14. They were assigned to Work Order 14-04-0058.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0058
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	04/01/14 16:30
		Number of Containers:	19
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#951	14-04-0058-7	04/01/14 11:16	1	Solid
#953	14-04-0058-9	04/01/14 11:18	1	Solid
#954	14-04-0058-10	04/01/14 11:19	1	Solid
#955	14-04-0058-11	04/01/14 11:20	1	Solid
#956	14-04-0058-12	04/01/14 11:21	1	Solid
#958	14-04-0058-14	04/01/14 11:23	1	Solid
#960	14-04-0058-16	04/01/14 11:25	1	Solid
#961	14-04-0058-17	04/01/14 11:26	1	Solid

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#951	**14-04-0058-7-A**	**04/01/14 11:16**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 15:06**	**140408B06**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	7.8	4.9	0.980	
C19-C20	30	4.9	0.980	
C21-C22	23	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	84	4.9	0.980	
C29-C32	95	4.9	0.980	
C33-C36	22	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	270	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	130	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#953	**14-04-0058-9-A**	**04/01/14 11:18**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 15:24**	**140408B06**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.01	
C7	ND	5.1	1.01	
C8	ND	5.1	1.01	
C9-C10	ND	5.1	1.01	
C11-C12	ND	5.1	1.01	
C13-C14	ND	5.1	1.01	
C15-C16	ND	5.1	1.01	
C17-C18	ND	5.1	1.01	
C19-C20	ND	5.1	1.01	
C21-C22	ND	5.1	1.01	
C23-C24	ND	5.1	1.01	
C25-C28	ND	5.1	1.01	
C29-C32	ND	5.1	1.01	
C33-C36	ND	5.1	1.01	
C37-C40	ND	5.1	1.01	
C41-C44	ND	5.1	1.01	
C6-C44 Total	ND	5.1	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#954	**14-04-0058-10-A**	**04/01/14 11:19**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 15:42**	**140408B06**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.01	
C7	ND	5.0	1.01	
C8	ND	5.0	1.01	
C9-C10	ND	5.0	1.01	
C11-C12	ND	5.0	1.01	
C13-C14	ND	5.0	1.01	
C15-C16	ND	5.0	1.01	
C17-C18	12	5.0	1.01	
C19-C20	65	5.0	1.01	
C21-C22	47	5.0	1.01	
C23-C24	7.4	5.0	1.01	
C25-C28	61	5.0	1.01	
C29-C32	42	5.0	1.01	
C33-C36	5.2	5.0	1.01	
C37-C40	ND	5.0	1.01	
C41-C44	ND	5.0	1.01	
C6-C44 Total	240	5.0	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	119	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#955	**14-04-0058-11-A**	**04/01/14 11:20**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 15:59**	**140408B06**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.01	
C7	ND	5.0	1.01	
C8	ND	5.0	1.01	
C9-C10	ND	5.0	1.01	
C11-C12	ND	5.0	1.01	
C13-C14	ND	5.0	1.01	
C15-C16	ND	5.0	1.01	
C17-C18	ND	5.0	1.01	
C19-C20	ND	5.0	1.01	
C21-C22	ND	5.0	1.01	
C23-C24	ND	5.0	1.01	
C25-C28	ND	5.0	1.01	
C29-C32	ND	5.0	1.01	
C33-C36	ND	5.0	1.01	
C37-C40	ND	5.0	1.01	
C41-C44	ND	5.0	1.01	
C6-C44 Total	ND	5.0	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#956	**14-04-0058-12-A**	**04/01/14 11:21**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 16:18**	**140408B06**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#958	**14-04-0058-14-A**	**04/01/14 11:23**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 16:35**	**140408B06**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	114	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#960	**14-04-0058-16-A**	**04/01/14 11:25**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 16:52**	**140408B06**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	6.6	4.9	0.980	
C19-C20	23	4.9	0.980	
C21-C22	17	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	30	4.9	0.980	
C29-C32	48	4.9	0.980	
C33-C36	8.6	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	140	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	119	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#961	**14-04-0058-17-A**	**04/01/14 11:26**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 17:10**	**140408B06**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.01	
C7	ND	5.0	1.01	
C8	ND	5.0	1.01	
C9-C10	ND	5.0	1.01	
C11-C12	ND	5.0	1.01	
C13-C14	ND	5.0	1.01	
C15-C16	ND	5.0	1.01	
C17-C18	ND	5.0	1.01	
C19-C20	14	5.0	1.01	
C21-C22	13	5.0	1.01	
C23-C24	ND	5.0	1.01	
C25-C28	ND	5.0	1.01	
C29-C32	ND	5.0	1.01	
C33-C36	ND	5.0	1.01	
C37-C40	ND	5.0	1.01	
C41-C44	ND	5.0	1.01	
C6-C44 Total	35	5.0	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-853**	**N/A**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 13:55**	**140408B06**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#951	**14-04-0058-7-A**	**04/01/14 11:16**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 14:44**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	90	60-132	
Dibromofluoromethane	120	63-141	
1,2-Dichloroethane-d4	125	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#953	**14-04-0058-9-A**	**04/01/14 11:18**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 16:39**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/01/14
121 Innovation Drive, Suite 200	Work Order:	14-04-0058
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 106270030		Page 4 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	60-132	
Dibromofluoromethane	112	63-141	
1,2-Dichloroethane-d4	121	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#954	**14-04-0058-10-A**	**04/01/14 11:19**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 17:08**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	60-132	
Dibromofluoromethane	110	63-141	
1,2-Dichloroethane-d4	115	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#955	**14-04-0058-11-A**	**04/01/14 11:20**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 17:37**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/01/14
121 Innovation Drive, Suite 200	Work Order:	14-04-0058
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 106270030		Page 8 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	60-132	
Dibromofluoromethane	111	63-141	
1,2-Dichloroethane-d4	119	62-146	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 9 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#956	**14-04-0058-12-A**	**04/01/14 11:21**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 18:06**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 10 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	60-132	
Dibromofluoromethane	110	63-141	
1,2-Dichloroethane-d4	122	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 11 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#958	**14-04-0058-14-A**	**04/01/14 11:23**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 18:34**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/01/14
121 Innovation Drive, Suite 200	Work Order:	14-04-0058
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 106270030		Page 12 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	60-132	
Dibromofluoromethane	110	63-141	
1,2-Dichloroethane-d4	119	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 13 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#960	**14-04-0058-16-A**	**04/01/14 11:25**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 19:03**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 14 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	60-132	
Dibromofluoromethane	113	63-141	
1,2-Dichloroethane-d4	120	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 15 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#961	**14-04-0058-17-A**	**04/01/14 11:26**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 19:32**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.8	1.00	
Bromobenzene	ND	4.8	1.00	
Bromochloromethane	ND	4.8	1.00	
Bromodichloromethane	ND	4.8	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	48	1.00	
n-Butylbenzene	ND	4.8	1.00	
sec-Butylbenzene	ND	4.8	1.00	
tert-Butylbenzene	ND	4.8	1.00	
Carbon Disulfide	ND	48	1.00	
Carbon Tetrachloride	ND	4.8	1.00	
Chlorobenzene	ND	4.8	1.00	
Chloroethane	ND	4.8	1.00	
Chloroform	ND	4.8	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.8	1.00	
4-Chlorotoluene	ND	4.8	1.00	
Dibromochloromethane	ND	4.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.6	1.00	
1,2-Dibromoethane	ND	4.8	1.00	
Dibromomethane	ND	4.8	1.00	
1,2-Dichlorobenzene	ND	4.8	1.00	
1,3-Dichlorobenzene	ND	4.8	1.00	
1,4-Dichlorobenzene	ND	4.8	1.00	
Dichlorodifluoromethane	ND	4.8	1.00	
1,1-Dichloroethane	ND	4.8	1.00	
1,2-Dichloroethane	ND	4.8	1.00	
1,1-Dichloroethene	ND	4.8	1.00	
c-1,2-Dichloroethene	ND	4.8	1.00	
t-1,2-Dichloroethene	ND	4.8	1.00	
1,2-Dichloropropane	ND	4.8	1.00	
1,3-Dichloropropane	ND	4.8	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 16 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.8	1.00	
c-1,3-Dichloropropene	ND	4.8	1.00	
t-1,3-Dichloropropene	ND	4.8	1.00	
Ethylbenzene	ND	4.8	1.00	
2-Hexanone	ND	48	1.00	
Isopropylbenzene	ND	4.8	1.00	
p-Isopropyltoluene	ND	4.8	1.00	
Methylene Chloride	ND	48	1.00	
4-Methyl-2-Pentanone	ND	48	1.00	
Naphthalene	ND	48	1.00	
n-Propylbenzene	ND	4.8	1.00	
Styrene	ND	4.8	1.00	
1,1,1,2-Tetrachloroethane	ND	4.8	1.00	
1,1,2,2-Tetrachloroethane	ND	4.8	1.00	
Tetrachloroethene	ND	4.8	1.00	
Toluene	ND	4.8	1.00	
1,2,3-Trichlorobenzene	ND	9.6	1.00	
1,2,4-Trichlorobenzene	ND	4.8	1.00	
1,1,1-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	48	1.00	
Trichloroethene	ND	4.8	1.00	
1,2,3-Trichloropropane	ND	4.8	1.00	
1,2,4-Trimethylbenzene	ND	4.8	1.00	
Trichlorofluoromethane	ND	48	1.00	
1,3,5-Trimethylbenzene	ND	4.8	1.00	
Vinyl Acetate	ND	48	1.00	
Vinyl Chloride	ND	4.8	1.00	
p/m-Xylene	ND	4.8	1.00	
o-Xylene	ND	4.8	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	60-132	
Dibromofluoromethane	112	63-141	
1,2-Dichloroethane-d4	123	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 17 of 18

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8358**	**N/A**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 13:45**	**140408L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 18 of 18

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	113	63-141	
1,2-Dichloroethane-d4	130	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#958	**Sample**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 16:35**	**140408S06**
#958	**Matrix Spike**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 14:30**	**140408S06**
#958	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 14:48**	**140408S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	401.2	100	389.8	97	64-130	3	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#951	**Sample**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 14:44**	**140408S008**
#951	**Matrix Spike**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 15:13**	**140408S008**
#951	**Matrix Spike Duplicate**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 15:42**	**140408S008**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	51.43	103	50.33	101	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	48.78	98	47.46	95	51-135	3	0-29	
Chlorobenzene	ND	50.00	53.34	107	51.88	104	57-123	3	0-20	
1,2-Dibromoethane	ND	50.00	50.39	101	51.99	104	64-124	3	0-20	
1,2-Dichlorobenzene	ND	50.00	43.98	88	40.46	81	35-131	8	0-25	
1,2-Dichloroethane	ND	50.00	54.37	109	53.37	107	80-120	2	0-20	
1,1-Dichloroethene	ND	50.00	50.79	102	51.46	103	47-143	1	0-25	
Ethylbenzene	ND	50.00	48.97	98	48.00	96	57-129	2	0-22	
Toluene	ND	50.00	52.19	104	50.80	102	63-123	3	0-20	
Trichloroethene	ND	50.00	52.49	105	53.28	107	44-158	1	0-20	
Vinyl Chloride	ND	50.00	42.38	85	43.64	87	49-139	3	0-47	
p/m-Xylene	ND	100.0	101.4	101	97.83	98	70-130	4	0-30	
o-Xylene	ND	50.00	49.44	99	48.44	97	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	42.82	86	44.44	89	57-123	4	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-853	**LCS**	**Solid**	**GC 47**	**04/08/14**	**04/08/14 14:12**	**140408B06**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	379.4	95	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/01/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0058
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8358	**LCS**	**Solid**	**GC/MS LL**	**04/08/14**	**04/08/14 12:43**	**140408L020**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	56.03	112	78-120	71-127	
Carbon Tetrachloride	50.00	54.64	109	49-139	34-154	
Chlorobenzene	50.00	60.71	121	79-120	72-127	ME
1,2-Dibromoethane	50.00	51.92	104	80-120	73-127	
1,2-Dichlorobenzene	50.00	58.40	117	75-120	68-128	
1,2-Dichloroethane	50.00	55.36	111	80-120	73-127	
1,1-Dichloroethene	50.00	55.72	111	74-122	66-130	
Ethylbenzene	50.00	57.01	114	76-120	69-127	
Toluene	50.00	57.46	115	77-120	70-127	
Trichloroethene	50.00	56.50	113	80-120	73-127	
Vinyl Chloride	50.00	46.71	93	68-122	59-131	
p/m-Xylene	100.0	116.9	117	75-125	67-133	
o-Xylene	50.00	58.69	117	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	45.62	91	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0058

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8260B	EPA 5030C	876	GC/MS LL	2

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Glossary of Terms and Qualifiers

Work Order: 14-04-0058

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, April 08, 2014 8:17 AM
To: Stephen Nowak
Cc: Conlan, Linda
Subject: RE: Pechiney / 106270030 / CEL 14-04-0058

Please analyze the following samples for VOCs using EPA Method 8260 and TPH using EPA Method 8015: #951, #953, #954, #955, #956, #958, #960, and #961. Use 24 hour TAT. Thanks,

Kim

From: Stephen Nowak [snowak@calscience.com]
Sent: Monday, April 07, 2014 11:33 AM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Pechiney / 106270030 / CEL 14-04-0058

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience

7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com

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CHAIN-OF-CUSTODY RECORD

NB 31300

PROJECT NAME: PECHINEY			DATE: 4/01/14 PAGE 1 OF 2
PROJECT NUMBER: 10627 0030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:	IRVINE	14-04-0058
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES: 8082 PCBs

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/1/14	0845	647-IV-P/S-CS-001	X	4oz JAR	O			X		1	
2		0850	647-IV-P/S-CS-002	X		O			X		1	
3		0857	647-IV-P/S-CS-003	X		O			X		1	
4		0902	678-IV-P/S-CS-001	X		O			X		1	
5		0908	678-IV-P/S-CS-002	X		O			X		1	
6		1115	#950	X		S			X		1	
7		1116	#951	X		S			X		1	
8		1117	#952	X		S			X		1	
9		1118	#953	X		S			X		1	
10		1119	#954	X		S			X		1	
11		1120	#955	X		S			X		1	
12		1121	#956	X		S			X		1	
13		1122	#957	X		S			X		1	
14		1123	#958	X		S			X		1	
15	4/1/14	1124	#959	X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	4/1/14	1448	SIGNATURE: [signature]	4/1/14	1448
PRINTED NAME: KEN CURNUTT			PRINTED NAME: ALEX MARQUEZ		
COMPANY: AMEC			COMPANY: CEL		
SIGNATURE: [signature]	4/1/14	1630	SIGNATURE: [signature]	4/1/14	1630
PRINTED NAME: ALEX MARQUEZ			PRINTED NAME: Noel Cruise		
COMPANY: CEL			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 31301

PROJECT NAME: PECHINEY		DATE: 4/1/14	PAGE 2 OF 2
PROJECT NUMBER: 10627 0030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 0058
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES: 8082 PCBs

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	4/1/14	1125	#960	X	4oz JAR	S			X		1	
17	↑	1126	#961	X	↑	S			X		1	
18	↓	1301	623-#6-P/S-CS-001	X	↓	O			X		1	
19	4/1/14	1312	623-#6-P/S-CS-002	X	4oz JAR	O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: KEN CURNUTT COMPANY: AMEC	4/1/14	1448	SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/1/14	1448
SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/1/14	1630	SIGNATURE: [signature] PRINTED NAME: NOEL CRUZ COMPANY: CEL	4/1/14	1630
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0058

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/1/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 3.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** SR

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** SR

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0163

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/07/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-0163

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0163 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/02/14. They were assigned to Work Order 14-04-0163.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0163
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	04/02/14 16:41
		Number of Containers:	15
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
690-IIB-P/S-CS-001	14-04-0163-1	04/02/14 08:03	1	Other
690-IIB-P/S-CS-002	14-04-0163-2	04/02/14 08:09	1	Other
690-IIB-P/S-CS-003	14-04-0163-3	04/02/14 08:17	1	Other
692-IIB-P/S-CS-001	14-04-0163-4	04/02/14 08:26	1	Other
692-IIB-P/S-CS-002	14-04-0163-5	04/02/14 08:36	1	Other
692-IIB-P/S-CS-003	14-04-0163-6	04/02/14 08:43	1	Other
692-IIB-P/S-O-001	14-04-0163-7	04/02/14 08:45	1	Solid
692-IIB-P/S-O-002	14-04-0163-8	04/02/14 08:46	1	Solid
693-IIB-P/S-CS-001	14-04-0163-9	04/02/14 08:53	1	Other
693-IIB-P/S-CS-002	14-04-0163-10	04/02/14 08:59	1	Other
DC-420	14-04-0163-11	04/02/14 09:20	1	Other
696-IV-P/S-CS-001	14-04-0163-12	04/02/14 13:11	1	Other
696-IV-P/S-CS-002	14-04-0163-13	04/02/14 13:19	1	Other
696-IV-P/S-SS-001	14-04-0163-14	04/02/14 13:20	1	Other
696-IV-P/S-SS-002	14-04-0163-15	04/02/14 13:22	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0163
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	04/02/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
690-IIB-P/S-CS-001 (14-04-0163-1)						
Aroclor-1248	170		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	420		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	360		50	ug/kg	EPA 8082	EPA 3540C
690-IIB-P/S-CS-002 (14-04-0163-2)						
Aroclor-1254	100		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	62		50	ug/kg	EPA 8082	EPA 3540C
692-IIB-P/S-CS-002 (14-04-0163-5)						
Aroclor-1248	120		50	ug/kg	EPA 8082	EPA 3540C
692-IIB-P/S-O-002 (14-04-0163-8)						
Aroclor-1248	2500		510	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2200		510	ug/kg	EPA 8082	EPA 3540C
DC-420 (14-04-0163-11)						
Aroclor-1248	800000		51000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	24000		5100	ug/kg	EPA 8082	EPA 3540C
696-IV-P/S-SS-001 (14-04-0163-14)						
Barium	126		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.501		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	20.3		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.3		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	18.5		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	20.7		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.0		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.6		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	53.0		0.985	mg/kg	EPA 6010B	EPA 3050B
C8	340		50	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	9100		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	3200		50	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	100		50	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	54		50	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	53		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	13000		50	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0163
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	04/02/14
Attn:	Linda Conlan		Page 2 of 2

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
696-IV-P/S-SS-002 (14-04-0163-15)						
Arsenic	1.26		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	96.3		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.336		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.3		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.29		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	13.1		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	26.7		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.94		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.7		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	49.4		0.995	mg/kg	EPA 6010B	EPA 3050B
C8	210		49	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	5700		49	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	1700		49	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	7700		49	mg/kg	EPA 8015B (M)	EPA 3550B

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-001	**14-04-0163-14-A**	**04/02/14 13:20**	**Other**	**GC 46**	**04/02/14**	**04/03/14 10:52**	**140402B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	340	50	10.0	
C9-C10	9100	50	10.0	
C11-C12	3200	50	10.0	
C13-C14	100	50	10.0	
C15-C16	54	50	10.0	
C17-C18	53	50	10.0	
C19-C20	ND	50	10.0	
C21-C22	ND	50	10.0	
C23-C24	ND	50	10.0	
C25-C28	ND	50	10.0	
C29-C32	ND	50	10.0	
C33-C36	ND	50	10.0	
C37-C40	ND	50	10.0	
C41-C44	ND	50	10.0	
C6-C44 Total	13000	50	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	74	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-002	**14-04-0163-15-A**	**04/02/14 13:22**	**Other**	**GC 46**	**04/02/14**	**04/03/14 11:09**	**140402B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	49	9.80	
C7	ND	49	9.80	
C8	210	49	9.80	
C9-C10	5700	49	9.80	
C11-C12	1700	49	9.80	
C13-C14	ND	49	9.80	
C15-C16	ND	49	9.80	
C17-C18	ND	49	9.80	
C19-C20	ND	49	9.80	
C21-C22	ND	49	9.80	
C23-C24	ND	49	9.80	
C25-C28	ND	49	9.80	
C29-C32	ND	49	9.80	
C33-C36	ND	49	9.80	
C37-C40	ND	49	9.80	
C41-C44	ND	49	9.80	
C6-C44 Total	7700	49	9.80	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	69	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-848**	**N/A**	**Solid**	**GC 46**	**04/02/14**	**04/02/14 14:42**	**140402B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	73	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-001	**14-04-0163-14-A**	**04/02/14 13:20**	**Other**	**ICP 7300**	**04/02/14**	**04/03/14 13:43**	**140402L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	ND	0.739	0.985	
Barium	126	0.493	0.985	
Beryllium	0.501	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	20.3	0.246	0.985	
Cobalt	10.3	0.246	0.985	
Copper	18.5	0.493	0.985	
Lead	20.7	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	11.0	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	31.6	0.246	0.985	
Zinc	53.0	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-002	**14-04-0163-15-A**	**04/02/14 13:22**	**Other**	**ICP 7300**	**04/02/14**	**04/03/14 13:44**	**140402L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	1.26	0.746	0.995	
Barium	96.3	0.498	0.995	
Beryllium	0.336	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	12.3	0.249	0.995	
Cobalt	8.29	0.249	0.995	
Copper	13.1	0.498	0.995	
Lead	26.7	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	8.94	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	28.7	0.249	0.995	
Zinc	49.4	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18231**	**N/A**	**Solid**	**ICP 7300**	**04/02/14**	**04/02/14 18:22**	**140402L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-001	**14-04-0163-14-A**	**04/02/14 13:20**	**Other**	**Mercury**	**04/03/14**	**04/03/14 11:40**	**140403L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

696-IV-P/S-SS-002	**14-04-0163-15-A**	**04/02/14 13:22**	**Other**	**Mercury**	**04/03/14**	**04/03/14 11:43**	**140403L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Method Blank	**099-16-272-142**	**N/A**	**Solid**	**Mercury**	**04/03/14**	**04/03/14 11:05**	**140403L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
690-IIB-P/S-CS-001	**14-04-0163-1-A**	**04/02/14 08:03**	**Other**	**GC 58**	**04/02/14**	**04/04/14 01:52**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	170	50	1.00	
Aroclor-1254	420	50	1.00	
Aroclor-1260	360	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

690-IIB-P/S-CS-002	**14-04-0163-2-A**	**04/02/14 08:09**	**Other**	**GC 58**	**04/02/14**	**04/04/14 02:09**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	100	50	1.00	
Aroclor-1260	62	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
690-IIB-P/S-CS-003	**14-04-0163-3-A**	**04/02/14 08:17**	**Other**	**GC 58**	**04/02/14**	**04/04/14 02:27**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

692-IIB-P/S-CS-001	**14-04-0163-4-A**	**04/02/14 08:26**	**Other**	**GC 58**	**04/02/14**	**04/04/14 02:45**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
692-IIB-P/S-CS-002	**14-04-0163-5-A**	**04/02/14 08:36**	**Other**	**GC 58**	**04/02/14**	**04/04/14 03:03**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	120	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

692-IIB-P/S-CS-003	**14-04-0163-6-A**	**04/02/14 08:43**	**Other**	**GC 58**	**04/02/14**	**04/04/14 03:21**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
692-IIB-P/S-O-001	**14-04-0163-7-A**	**04/02/14 08:45**	**Solid**	**GC 58**	**04/02/14**	**04/04/14 03:39**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

692-IIB-P/S-O-002	**14-04-0163-8-A**	**04/02/14 08:46**	**Solid**	**GC 58**	**04/02/14**	**04/04/14 15:42**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	510	10.0	
Aroclor-1221	ND	510	10.0	
Aroclor-1232	ND	510	10.0	
Aroclor-1242	ND	510	10.0	
Aroclor-1248	2500	510	10.0	
Aroclor-1254	ND	510	10.0	
Aroclor-1260	2200	510	10.0	
Aroclor-1262	ND	510	10.0	
Aroclor-1268	ND	510	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	279	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
693-IIB-P/S-CS-001	**14-04-0163-9-A**	**04/02/14 08:53**	**Other**	**GC 58**	**04/02/14**	**04/04/14 04:15**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

693-IIB-P/S-CS-002	**14-04-0163-10-A**	**04/02/14 08:59**	**Other**	**GC 58**	**04/02/14**	**04/04/14 04:33**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-420	**14-04-0163-11-A**	**04/02/14 09:20**	**Other**	**GC 58**	**04/02/14**	**04/04/14 14:49**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5100	100	
Aroclor-1221	ND	5100	100	
Aroclor-1232	ND	5100	100	
Aroclor-1242	ND	5100	100	
Aroclor-1254	ND	5100	100	
Aroclor-1260	24000	5100	100	
Aroclor-1262	ND	5100	100	
Aroclor-1268	ND	5100	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	209	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

DC-420	**14-04-0163-11-A**	**04/02/14 09:20**	**Other**	**GC 58**	**04/02/14**	**04/04/14 14:31**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	800000	51000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	250	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-CS-001	**14-04-0163-12-A**	**04/02/14 13:11**	**Other**	**GC 58**	**04/02/14**	**04/04/14 13:37**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

696-IV-P/S-CS-002	**14-04-0163-13-A**	**04/02/14 13:19**	**Other**	**GC 58**	**04/02/14**	**04/04/14 05:27**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-001	**14-04-0163-14-A**	**04/02/14 13:20**	**Other**	**GC 58**	**04/02/14**	**04/04/14 16:00**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

696-IV-P/S-SS-002	**14-04-0163-15-A**	**04/02/14 13:22**	**Other**	**GC 58**	**04/02/14**	**04/04/14 16:18**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-224**	**N/A**	**Solid**	**GC 58**	**04/02/14**	**04/03/14 20:28**	**140402L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0068-9	**Sample**	**Solid**	**GC 46**	**04/02/14**	**04/02/14 18:15**	**140402S01**
14-04-0068-9	**Matrix Spike**	**Solid**	**GC 46**	**04/02/14**	**04/02/14 15:18**	**140402S01**
14-04-0068-9	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**04/02/14**	**04/02/14 15:35**	**140402S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	368.9	92	341.3	85	64-130	8	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-03-1920-1	**Sample**	**Solid**	**ICP 7300**	**04/02/14**	**04/02/14 18:25**	**140402S01**
14-03-1920-1	**Matrix Spike**	**Solid**	**ICP 7300**	**04/02/14**	**04/02/14 18:26**	**140402S01**
14-03-1920-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/02/14**	**04/02/14 18:27**	**140402S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	9.337	37	8.868	35	50-115	5	0-20	3
Arsenic	4.648	25.00	34.15	118	30.55	104	75-125	11	0-20	
Barium	104.4	25.00	142.4	4X	143.9	4X	75-125	4X	0-20	Q
Beryllium	0.3719	25.00	27.17	107	26.74	105	75-125	2	0-20	
Cadmium	ND	25.00	25.76	103	25.07	100	75-125	3	0-20	
Chromium	17.34	25.00	42.39	100	40.88	94	75-125	4	0-20	
Cobalt	6.576	25.00	34.59	112	35.57	116	75-125	3	0-20	
Copper	12.49	25.00	39.35	107	40.52	112	75-125	3	0-20	
Lead	27.93	25.00	48.52	82	47.45	78	75-125	2	0-20	
Molybdenum	0.2795	25.00	24.24	96	23.56	93	75-125	3	0-20	
Nickel	18.49	25.00	45.27	107	46.21	111	75-125	2	0-20	
Selenium	ND	25.00	22.95	92	22.43	90	75-125	2	0-20	
Silver	ND	12.50	13.23	106	13.07	105	75-125	1	0-20	
Thallium	ND	25.00	22.78	91	15.23	61	75-125	40	0-20	3,4
Vanadium	32.47	25.00	64.28	127	66.54	136	75-125	3	0-20	3
Zinc	54.06	25.00	78.99	100	83.83	119	75-125	6	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0164-10	**Sample**	**Solid**	**Mercury 05**	**04/03/14**	**04/03/14 11:34**	**140403S01**
14-04-0164-10	**Matrix Spike**	**Solid**	**Mercury**	**04/03/14**	**04/03/14 11:36**	**140403S01**
14-04-0164-10	**Matrix Spike Duplicate**	**Solid**	**Mercury**	**04/03/14**	**04/03/14 11:38**	**140403S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7345	88	0.7381	88	71-137	0	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
696-IV-P/S-CS-002	**Sample**	**Other**	**GC 58**	**04/02/14**	**04/04/14 05:27**	**140402S18**
696-IV-P/S-CS-002	**Matrix Spike**	**Other**	**GC 58**	**04/02/14**	**04/03/14 21:21**	**140402S18**
696-IV-P/S-CS-002	**Matrix Spike Duplicate**	**Other**	**GC 58**	**04/02/14**	**04/03/14 21:40**	**140402S18**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	99.58	100	100.3	100	50-135	1	0-25	
Aroclor-1260	ND	100.0	101.4	101	104.0	104	50-135	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-848	**LCS**	**Solid**	**GC 46**	**04/02/14**	**04/02/14 15:00**	**140402B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	369.4	92	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18231	**LCS**	**Solid**	**ICP 7300**	**04/02/14**	**04/02/14 18:24**	**140402L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.58	106	80-120	73-127	
Arsenic	25.00	25.83	103	80-120	73-127	
Barium	25.00	26.13	105	80-120	73-127	
Beryllium	25.00	25.84	103	80-120	73-127	
Cadmium	25.00	26.94	108	80-120	73-127	
Chromium	25.00	26.39	106	80-120	73-127	
Cobalt	25.00	28.76	115	80-120	73-127	
Copper	25.00	26.38	106	80-120	73-127	
Lead	25.00	27.51	110	80-120	73-127	
Molybdenum	25.00	27.18	109	80-120	73-127	
Nickel	25.00	27.88	112	80-120	73-127	
Selenium	25.00	23.78	95	80-120	73-127	
Silver	12.50	13.07	105	80-120	73-127	
Thallium	25.00	27.36	109	80-120	73-127	
Vanadium	25.00	25.57	102	80-120	73-127	
Zinc	25.00	26.74	107	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-142	**LCS**	**Solid**	**Mercury**	**04/03/14**	**04/03/14 11:07**	**140403L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7767	93	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/02/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0163
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-224	**LCS**	**Solid**	**GC 58**	**04/02/14**	**04/03/14 20:10**	**140402L18**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	93.91	94	50-135	
Aroclor-1260	100.0	91.46	91	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0163

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	598	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	669	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0163 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31302

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 4-2-14

PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

Irvine

14-04-0163

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chomunsky, Kevin Conner

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	8015 TPH	TITLE 22 METALS	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-2-14	0803	690-IIB-P/S-CS-001	X			4 oz glass jar	O			X		1	
2		0809	690-IIB-P/S-CS-002	X				O			X		1	
3		0817	690-IIB-P/S-CS-003	X				O			X		1	
4		0826	692-IIB-P/S-CS-001	X				O			X		1	
5		0836	692-IIB-P/S-CS-002	X				O			X		1	
6		0843	692-IIB-P/S-CS-003	X				O			X		1	
7		0845	692-IIB-P/S-O-001	X				S			X		1	
8		0846	692-IIB-P/S-O-002	X				S			X		1	
9		0853	693-IIB-P/S-CS-001	X				O			X		1	
10		0859	693-IIB-P/S-CS-002	X				O			X		1	
11		0920	DC-420	X				O			X		1	
12		1311	696-IV-P/S-CS-001	X				O			X		1	
13		1319	696-IV-P/S-CS-002	X				O			X		1	
14		1320	696-IV-P/S-SS-001	X	X	X		O			X		1	
15	4/2/14	1322	696-IV-P/S-SS-002	X	X	X	4 oz JAR	O			X		1	

TOTAL NUMBER OF CONTAINERS: 15

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Kevin Conner COMPANY: AMEC	4/2/14	1451	SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/2/14	1451
SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/2/14	1641	SIGNATURE: [signature] PRINTED NAME: J. PATEL COMPANY: CEL	4/2/14	1641
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0163

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/2/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 920

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 920

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na_2:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0278

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/07/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-0278

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0278 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/03/14. They were assigned to Work Order 14-04-0278.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0278
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	04/03/14 17:30
		Number of Containers:	7
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-19	14-04-0278-1	04/03/14 10:13	1	Solid
W-20	14-04-0278-2	04/03/14 10:16	1	Solid
W-21	14-04-0278-3	04/03/14 10:25	1	Solid
W-22	14-04-0278-4	04/03/14 10:34	1	Solid
W-23	14-04-0278-5	04/03/14 10:36	1	Solid
W-24	14-04-0278-6	04/03/14 10:56	1	Solid
W-25	14-04-0278-7	04/03/14 11:05	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0278
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/03/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-19 (14-04-0278-1)						
Arsenic	38.4		0.773	mg/kg	EPA 6010B	EPA 3050B
Barium	118		0.515	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.353		0.258	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.3		0.258	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.5		0.258	mg/kg	EPA 6010B	EPA 3050B
Copper	24.1		0.515	mg/kg	EPA 6010B	EPA 3050B
Lead	28.0		0.515	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.1		0.258	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.7		0.258	mg/kg	EPA 6010B	EPA 3050B
Zinc	162		1.03	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	570		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	260		50	ug/kg	EPA 8082	EPA 3540C
W-20 (14-04-0278-2)						
Arsenic	29.5		0.721	mg/kg	EPA 6010B	EPA 3050B
Barium	117		0.481	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.348		0.240	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.0		0.240	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.7		0.240	mg/kg	EPA 6010B	EPA 3050B
Copper	16.5		0.481	mg/kg	EPA 6010B	EPA 3050B
Lead	4.54		0.481	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.6		0.240	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.7		0.240	mg/kg	EPA 6010B	EPA 3050B
Zinc	122		0.962	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0278
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/03/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-21 (14-04-0278-3)						
Arsenic	44.2		0.728	mg/kg	EPA 6010B	EPA 3050B
Barium	551		0.485	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.494		0.243	mg/kg	EPA 6010B	EPA 3050B
Cadmium	4.39		0.485	mg/kg	EPA 6010B	EPA 3050B
Chromium	52.2		0.243	mg/kg	EPA 6010B	EPA 3050B
Cobalt	13.5		0.243	mg/kg	EPA 6010B	EPA 3050B
Copper	214		0.485	mg/kg	EPA 6010B	EPA 3050B
Lead	447		0.485	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	7.16		0.243	mg/kg	EPA 6010B	EPA 3050B
Nickel	40.4		0.243	mg/kg	EPA 6010B	EPA 3050B
Silver	1.09		0.243	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.2		0.243	mg/kg	EPA 6010B	EPA 3050B
Zinc	925		0.971	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.280		0.0847	mg/kg	EPA 7471A	EPA 7471A Total
Aroclor-1248	9200		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	6500		2500	ug/kg	EPA 8082	EPA 3540C
W-22 (14-04-0278-4)						
Arsenic	55.8		0.777	mg/kg	EPA 6010B	EPA 3050B
Barium	96.4		0.518	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.334		0.259	mg/kg	EPA 6010B	EPA 3050B
Cadmium	1.00		0.518	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.1		0.259	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.21		0.259	mg/kg	EPA 6010B	EPA 3050B
Copper	39.6		0.518	mg/kg	EPA 6010B	EPA 3050B
Lead	24.7		0.518	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.0		0.259	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.5		0.259	mg/kg	EPA 6010B	EPA 3050B
Zinc	281		1.04	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	72		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	470		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0278
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/03/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-23 (14-04-0278-5)						
Arsenic	27.5		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	130		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.358		0.251	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.7		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.4		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	16.2		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	1.84		0.503	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.2		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.9		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	54.5		1.01	mg/kg	EPA 6010B	EPA 3050B
W-24 (14-04-0278-6)						
Arsenic	92.3		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	255		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.322		0.256	mg/kg	EPA 6010B	EPA 3050B
Cadmium	1.63		0.513	mg/kg	EPA 6010B	EPA 3050B
Chromium	29.8		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.9		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	84.6		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	165		0.513	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	3.17		0.256	mg/kg	EPA 6010B	EPA 3050B
Nickel	24.5		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.5		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	307		1.03	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	580		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	630		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0278
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/03/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-25 (14-04-0278-7)						
Arsenic	81.9		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	234		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.328		0.250	mg/kg	EPA 6010B	EPA 3050B
Cadmium	1.69		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	29.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	92.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	152		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	3.92		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	23.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	344		1.00	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	560		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	480		50	ug/kg	EPA 8082	EPA 3540C

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-19	**14-04-0278-1-A**	**04/03/14 10:13**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:07**	**140404L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.773	1.03	
Arsenic	38.4	0.773	1.03	
Barium	118	0.515	1.03	
Beryllium	0.353	0.258	1.03	
Cadmium	ND	0.515	1.03	
Chromium	16.3	0.258	1.03	
Cobalt	10.5	0.258	1.03	
Copper	24.1	0.515	1.03	
Lead	28.0	0.515	1.03	
Molybdenum	ND	0.258	1.03	
Nickel	13.1	0.258	1.03	
Selenium	ND	0.773	1.03	
Silver	ND	0.258	1.03	
Thallium	ND	0.773	1.03	
Vanadium	35.7	0.258	1.03	
Zinc	162	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-20	**14-04-0278-2-A**	**04/03/14 10:16**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:08**	**140404L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.721	0.962	
Arsenic	29.5	0.721	0.962	
Barium	117	0.481	0.962	
Beryllium	0.348	0.240	0.962	
Cadmium	ND	0.481	0.962	
Chromium	16.0	0.240	0.962	
Cobalt	10.7	0.240	0.962	
Copper	16.5	0.481	0.962	
Lead	4.54	0.481	0.962	
Molybdenum	ND	0.240	0.962	
Nickel	11.6	0.240	0.962	
Selenium	ND	0.721	0.962	
Silver	ND	0.240	0.962	
Thallium	ND	0.721	0.962	
Vanadium	36.7	0.240	0.962	
Zinc	122	0.962	0.962	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-21	**14-04-0278-3-A**	**04/03/14 10:25**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:09**	**140404L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.728	0.971	
Arsenic	44.2	0.728	0.971	
Barium	551	0.485	0.971	
Beryllium	0.494	0.243	0.971	
Cadmium	4.39	0.485	0.971	
Chromium	52.2	0.243	0.971	
Cobalt	13.5	0.243	0.971	
Copper	214	0.485	0.971	
Lead	447	0.485	0.971	
Molybdenum	7.16	0.243	0.971	
Nickel	40.4	0.243	0.971	
Selenium	ND	0.728	0.971	
Silver	1.09	0.243	0.971	
Thallium	ND	0.728	0.971	
Vanadium	30.2	0.243	0.971	
Zinc	925	0.971	0.971	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-22	**14-04-0278-4-A**	**04/03/14 10:34**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:10**	**140404L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.777	1.04	
Arsenic	55.8	0.777	1.04	
Barium	96.4	0.518	1.04	
Beryllium	0.334	0.259	1.04	
Cadmium	1.00	0.518	1.04	
Chromium	15.1	0.259	1.04	
Cobalt	9.21	0.259	1.04	
Copper	39.6	0.518	1.04	
Lead	24.7	0.518	1.04	
Molybdenum	ND	0.259	1.04	
Nickel	12.0	0.259	1.04	
Selenium	ND	0.777	1.04	
Silver	ND	0.259	1.04	
Thallium	ND	0.777	1.04	
Vanadium	32.5	0.259	1.04	
Zinc	281	1.04	1.04	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-23	**14-04-0278-5-A**	**04/03/14 10:36**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:11**	**140404L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	27.5	0.754	1.01	
Barium	130	0.503	1.01	
Beryllium	0.358	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	16.7	0.251	1.01	
Cobalt	11.4	0.251	1.01	
Copper	16.2	0.503	1.01	
Lead	1.84	0.503	1.01	
Molybdenum	ND	0.251	1.01	
Nickel	12.2	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	37.9	0.251	1.01	
Zinc	54.5	1.01	1.01	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-24	**14-04-0278-6-A**	**04/03/14 10:56**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:13**	**140404L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	92.3	0.769	1.03	
Barium	255	0.513	1.03	
Beryllium	0.322	0.256	1.03	
Cadmium	1.63	0.513	1.03	
Chromium	29.8	0.256	1.03	
Cobalt	10.9	0.256	1.03	
Copper	84.6	0.513	1.03	
Lead	165	0.513	1.03	
Molybdenum	3.17	0.256	1.03	
Nickel	24.5	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	31.5	0.256	1.03	
Zinc	307	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-25	**14-04-0278-7-A**	**04/03/14 11:05**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:14**	**140404L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	81.9	0.750	1.00	
Barium	234	0.500	1.00	
Beryllium	0.328	0.250	1.00	
Cadmium	1.69	0.500	1.00	
Chromium	29.8	0.250	1.00	
Cobalt	12.4	0.250	1.00	
Copper	92.4	0.500	1.00	
Lead	152	0.500	1.00	
Molybdenum	3.92	0.250	1.00	
Nickel	23.5	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	30.6	0.250	1.00	
Zinc	344	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18241**	**N/A**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 19:16**	**140404L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-19	**14-04-0278-1-A**	**04/03/14 10:13**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 11:59**	**140404L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

W-20	**14-04-0278-2-A**	**04/03/14 10:16**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:01**	**140404L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

W-21	**14-04-0278-3-A**	**04/03/14 10:25**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:03**	**140404L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.280	0.0847	1.00	

W-22	**14-04-0278-4-A**	**04/03/14 10:34**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:06**	**140404L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

W-23	**14-04-0278-5-A**	**04/03/14 10:36**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:08**	**140404L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

W-24	**14-04-0278-6-A**	**04/03/14 10:56**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:10**	**140404L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

W-25	**14-04-0278-7-A**	**04/03/14 11:05**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:17**	**140404L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Method Blank	**099-16-272-144**	**N/A**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 11:52**	**140404L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-19	**14-04-0278-1-A**	**04/03/14 10:13**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 13:09**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	570	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	260	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	125	50-130	

W-20	**14-04-0278-2-A**	**04/03/14 10:16**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 13:29**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	125	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-21	**14-04-0278-3-A**	**04/03/14 10:25**	**Solid**	**GC 31**	**04/03/14**	**04/07/14 12:55**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	2500	50.0	
Aroclor-1221	ND	2500	50.0	
Aroclor-1232	ND	2500	50.0	
Aroclor-1242	ND	2500	50.0	
Aroclor-1248	9200	2500	50.0	
Aroclor-1254	ND	2500	50.0	
Aroclor-1260	6500	2500	50.0	
Aroclor-1262	ND	2500	50.0	
Aroclor-1268	ND	2500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	188	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	121	50-130	

W-22	**14-04-0278-4-A**	**04/03/14 10:34**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 14:07**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	72	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	470	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	156	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	118	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-23	**14-04-0278-5-A**	**04/03/14 10:36**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 14:26**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	123	50-130	

W-24	**14-04-0278-6-A**	**04/03/14 10:56**	**Solid**	**GC 31**	**04/03/14**	**04/07/14 13:33**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	580	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	630	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	122	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-25	**14-04-0278-7-A**	**04/03/14 11:05**	**Solid**	**GC 31**	**04/03/14**	**04/07/14 13:52**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	560	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	480	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

Method Blank	**099-02-003-226**	**N/A**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 12:12**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-25	**Sample**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:14**	**140404S02**
W-25	**Matrix Spike**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 19:59**	**140404S02**
W-25	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 20:00**	**140404S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	9.342	37	9.963	40	50-115	6	0-20	3
Arsenic	81.88	25.00	110.0	112	118.0	145	75-125	7	0-20	3
Barium	234.1	25.00	235.1	4X	260.0	4X	75-125	4X	0-20	Q
Beryllium	0.3280	25.00	27.15	107	27.70	109	75-125	2	0-20	
Cadmium	1.687	25.00	27.13	102	27.50	103	75-125	1	0-20	
Chromium	29.75	25.00	51.27	86	52.95	93	75-125	3	0-20	
Cobalt	12.35	25.00	36.96	98	38.12	103	75-125	3	0-20	
Copper	92.40	25.00	93.76	5	101.8	38	75-125	8	0-20	3
Lead	152.4	25.00	163.8	4X	168.3	4X	75-125	4X	0-20	Q
Molybdenum	3.922	25.00	27.58	95	28.01	96	75-125	2	0-20	
Nickel	23.51	25.00	46.36	91	46.70	93	75-125	1	0-20	
Selenium	ND	25.00	22.62	90	22.95	92	75-125	1	0-20	
Silver	ND	12.50	13.81	110	14.19	113	75-125	3	0-20	
Thallium	ND	25.00	20.96	84	21.42	86	75-125	2	0-20	
Vanadium	30.61	25.00	56.44	103	60.02	118	75-125	6	0-20	
Zinc	344.3	25.00	311.5	4X	343.2	4X	75-125	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-25	**Sample**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:17**	**140404S01**
W-25	**Matrix Spike**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:19**	**140404S01**
W-25	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 12:21**	**140404S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7611	91	0.8191	98	71-137	7	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-19	**Sample**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 13:09**	**140403S16**
W-19	**Matrix Spike**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 12:31**	**140403S16**
W-19	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 12:50**	**140403S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	325.7	326	267.7	268	50-135	20	0-25	3
Aroclor-1260	258.9	100.0	686.3	427	546.4	287	50-135	23	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18241	**LCS**	**Solid**	**ICP 7300**	**04/04/14**	**04/04/14 19:20**	**140404L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	28.31	113	80-120	73-127	
Arsenic	25.00	25.70	103	80-120	73-127	
Barium	25.00	26.18	105	80-120	73-127	
Beryllium	25.00	25.88	104	80-120	73-127	
Cadmium	25.00	26.75	107	80-120	73-127	
Chromium	25.00	26.75	107	80-120	73-127	
Cobalt	25.00	28.63	115	80-120	73-127	
Copper	25.00	26.22	105	80-120	73-127	
Lead	25.00	26.62	106	80-120	73-127	
Molybdenum	25.00	26.33	105	80-120	73-127	
Nickel	25.00	27.93	112	80-120	73-127	
Selenium	25.00	23.51	94	80-120	73-127	
Silver	12.50	13.65	109	80-120	73-127	
Thallium	25.00	28.57	114	80-120	73-127	
Vanadium	25.00	25.74	103	80-120	73-127	
Zinc	25.00	26.34	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-272-144	**LCS**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 11:54**	**140404L01**
099-16-272-144	**LCSD**	**Solid**	**Mercury 05**	**04/04/14**	**04/04/14 11:57**	**140404L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.7408	89	0.7423	89	85-121	0	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-226	**LCS**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 11:53**	**140403L16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	115.0	115	50-135	
Aroclor-1260	100.0	107.3	107	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0278

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0278

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31304

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: PECHINEY		DATE: 4/3/14	PAGE 1 OF 1
PROJECT NUMBER: 10627003O	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 14-04-0278
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	TBTLC 22 METALS	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/3/14	1013	W-19	X	X	4oz JAR	S			X		1	
2		1016	W-20	X	X		S			X		1	
3		1025	W-21	X	X		S			X		1	
4		1034	W-22	X	X		S			X		1	
5		1036	W-23	X	X		S			X		1	
6		1056	W-24	X	X		S			X		1	
7	4/3/14	1105	W-25	X	X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Ken Curnutt COMPANY: AMEC	4/3/14	1440	SIGNATURE: [signature] PRINTED NAME: STEPHEN Anning COMPANY: AMEC	4/3/14	1440
SIGNATURE: [signature] PRINTED NAME: STEPHEN Anning COMPANY: AMEC	4/3/14	1500	SIGNATURE: [signature] PRINTED NAME: DENNY IRWIN COMPANY: COL	04/03/14	15:00
SIGNATURE: [signature] PRINTED NAME: DENNY IRWIN COMPANY: COL	4/3/14	17:30	SIGNATURE: [signature] PRINTED NAME: Yan Lino COMPANY: COL	4/3/14	1730

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0278

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/03/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 802

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 802

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0278

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/08/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Pechiney / 106270030
Work Order Number: 14-04-0278

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3 Detections Summary. 5

4 Client Sample Data. 6
4.1 EPA 6010B STLC ICP Metals (Aqueous). 6

5 Quality Control Sample Data. 7
5.1 MS/MSD. 7
5.2 LCS/LCSD. 8

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0278 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/03/14. They were assigned to Work Order 14-04-0278.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0278
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	04/03/14 17:30
		Number of Containers:	7
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-21	14-04-0278-3	04/03/14 10:25	1	Solid
W-24	14-04-0278-6	04/03/14 10:56	1	Solid
W-25	14-04-0278-7	04/03/14 11:05	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0278
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/03/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-21 (14-04-0278-3)						
Lead	31.2		0.100	mg/L	EPA 6010B	T22.11.5. All
W-24 (14-04-0278-6)						
Arsenic	6.18		0.150	mg/L	EPA 6010B	T22.11.5. All
Lead	8.27		0.100	mg/L	EPA 6010B	T22.11.5. All
W-25 (14-04-0278-7)						
Lead	8.25		0.100	mg/L	EPA 6010B	T22.11.5. All

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-21	**14-04-0278-3-A**	**04/03/14 10:25**	**Solid**	**ICP 7300**	**04/30/14**	**05/02/14 16:43**	**140502LA2**

Parameter	Result	RL	DF	Qualifiers
Lead	31.2	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-24	**14-04-0278-6-A**	**04/03/14 10:56**	**Solid**	**ICP 7300**	**04/30/14**	**05/02/14 16:50**	**140502LA2**

Parameter	Result	RL	DF	Qualifiers
Arsenic	6.18	0.150	1.00	
Lead	8.27	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-25	**14-04-0278-7-A**	**04/03/14 11:05**	**Solid**	**ICP 7300**	**04/30/14**	**05/02/14 16:51**	**140502LA2**

Parameter	Result	RL	DF	Qualifiers
Lead	8.25	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-05-006-7247**	**N/A**	**Aqueous**	**ICP 7300**	**04/30/14**	**05/02/14 16:28**	**140502LA2**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.150	1.00	
Lead	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1871-1	**Sample**	**Solid**	**ICP 7300**	**04/30/14**	**05/02/14 16:39**	**140502SA2**
14-04-1871-1	**Matrix Spike**	**Solid**	**ICP 7300**	**04/30/14**	**05/02/14 16:40**	**140502SA2**
14-04-1871-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/30/14**	**05/02/14 16:42**	**140502SA2**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	5.000	4.361	87	4.830	97	75-125	10	0-20	
Lead	0.2522	5.000	4.680	89	5.131	98	75-125	9	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0278
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7247	**LCS**	**Aqueous**	**ICP 7300**	**04/30/14**	**05/02/14 16:31**	**140502LA2**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.000	4.848	97	80-120	
Lead	5.000	5.175	104	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0278

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Wednesday, April 30, 2014 1:44 PM
To: Stephen Nowak
Subject: Requests for STLC for Pechiney Project

Additional analyses for STLC for Pb and As requested:
Samples collected 10/31/13
W-1: Pb
W-2: Pb
W-7: As
W-8: As
Samples collected 4/2/14
W-9: As
W-15: As, Pb
Samples collected 4/3/14
W-21: Pb
W-24: As, Pb
W-25: Pb

Standard Turnaround time is ok for these. Would that be 5 days?

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NB 31304

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: PECHINEY		DATE: 4/3/14	PAGE 1 OF 1
PROJECT NUMBER: 06270030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 14-04-0278
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	TPH 22 METALS	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/3/14	1013	W-19	X	X	4oz JAR	S			X		1	
2		1016	W-20	X	X		S			X		1	
3		1025	W-21	X	X		S			X		1	
4		1034	W-22	X	X		S			X		1	
5		1036	W-23	X	X		S			X		1	
6		1056	W-24	X	X		S			X		1	
7	4/3/14	1105	W-25	X	X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Ken Curnutt COMPANY: AMEC	4/3/14	1440	SIGNATURE: [signature] PRINTED NAME: STEPHEN Anning COMPANY: AMEC	4/3/14	1440
SIGNATURE: [signature] PRINTED NAME: STEPHEN Anning COMPANY: AMEC	4/3/14	1500	SIGNATURE: [signature] PRINTED NAME: DENNY IRWIN COMPANY: COL	04/03/14	15:00
SIGNATURE: [signature] PRINTED NAME: DENNY IRWIN COMPANY: COL	4/3/14	17:30	SIGNATURE: [signature] PRINTED NAME: Yan Lino COMPANY: COL	4/3/14	1730

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0278

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04 / 03 / 14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 802

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 802

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0279

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/07/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-04-0279

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0279 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/03/14. They were assigned to Work Order 14-04-0279.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0279
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	04/03/14 17:30
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#942-9	14-04-0279-1	04/03/14 11:15	1	Solid
#941-9	14-04-0279-2	04/03/14 11:22	1	Solid
#943-9	14-04-0279-3	04/03/14 11:26	1	Solid
#948-9.5	14-04-0279-4	04/03/14 11:30	1	Solid
#947-9	14-04-0279-5	04/03/14 11:33	1	Solid
#946-9	14-04-0279-6	04/03/14 11:37	1	Solid
701-IV-CS-CS-001	14-04-0279-7	04/03/14 13:30	1	Other
694-IIB-P/S-CS-001	14-04-0279-8	04/03/14 13:40	1	Other
694-IIB-P/S-CS-002	14-04-0279-9	04/03/14 13:45	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0279
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	04/03/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#942-9 (14-04-0279-1)						
Aroclor-1248	130		50	ug/kg	EPA 8082	EPA 3540C
#941-9 (14-04-0279-2)						
Aroclor-1248	290		51	ug/kg	EPA 8082	EPA 3540C
#943-9 (14-04-0279-3)						
Aroclor-1248	160		50	ug/kg	EPA 8082	EPA 3540C
#948-9.5 (14-04-0279-4)						
Aroclor-1248	87		50	ug/kg	EPA 8082	EPA 3540C
#946-9 (14-04-0279-6)						
Aroclor-1248	910		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	110		50	ug/kg	EPA 8082	EPA 3540C
694-IIB-P/S-CS-002 (14-04-0279-9)						
Aroclor-1248	97		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0279
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#942-9	**14-04-0279-1-A**	**04/03/14 11:15**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 16:36**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	130	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

#941-9	**14-04-0279-2-A**	**04/03/14 11:22**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 16:55**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	290	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	127	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0279
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#943-9	**14-04-0279-3-A**	**04/03/14 11:26**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 17:14**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	160	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

#948-9.5	**14-04-0279-4-A**	**04/03/14 11:30**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 17:33**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	87	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	123	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0279
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#947-9	**14-04-0279-5-A**	**04/03/14 11:33**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 17:52**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	123	50-130	

#946-9	**14-04-0279-6-A**	**04/03/14 11:37**	**Solid**	**GC 31**	**04/03/14**	**04/07/14 14:49**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	910	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	110	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	124	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0279
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
701-IV-CS-CS-001	**14-04-0279-7-A**	**04/03/14 13:30**	**Other**	**GC 31**	**04/03/14**	**04/05/14 18:30**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

694-IIB-P/S-CS-001	**14-04-0279-8-A**	**04/03/14 13:40**	**Other**	**GC 31**	**04/03/14**	**04/05/14 18:49**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	122	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0279
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
694-IIB-P/S-CS-002	**14-04-0279-9-A**	**04/03/14 13:45**	**Other**	**GC 31**	**04/03/14**	**04/05/14 19:08**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	97	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	123	50-130	

Method Blank	**099-02-003-226**	**N/A**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 12:12**	**140403L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0279
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0278-1	**Sample**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 13:09**	**140403S16**
14-04-0278-1	**Matrix Spike**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 12:31**	**140403S16**
14-04-0278-1	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 12:50**	**140403S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	325.7	326	267.7	268	50-135	20	0-25	3
Aroclor-1260	258.9	100.0	686.3	427	546.4	287	50-135	23	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/03/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0279
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-226	**LCS**	**Solid**	**GC 31**	**04/03/14**	**04/05/14 11:53**	**140403L16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	115.0	115	50-135	
Aroclor-1260	100.0	107.3	107	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0279

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0279

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31305

PROJECT NAME: Former Pechiney Cast Plate Facility		DATE: 4-3-14	PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC Irvine	REPORTING REQUIREMENTS: 14-04-0279
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Ken Curnutt

ANALYSES: EPA 8082 (PCBs)

	DATE	TIME	SAMPLE NUMBER	EPA 8082 (PCBs)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-3-14	1115	#942-9	X	4oz glass jar	S			X		1	
2		1122	#941-9	X		S			X		1	
3		1126	#943-9	X		S			X		1	
4		1130	#948-9.5	X		S			X		1	
5		1133	#947-9	X		S			X		1	
6		1137	#946-9	X		S			X		1	
7		1330	701-IV-CS-CS-001	X		O			X		1	
8		1340	694-IIB-P/S-CS-001	X		O			X		1	
9		1345	694-IIB-P/S-CS-002	X	4oz Jar	O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: / PRINTED NAME: Ken Curnutt / COMPANY: AMEC	4/3/14	1440	SIGNATURE: / PRINTED NAME: Stephen Huang / COMPANY: AMEC	4/3/14	1440
SIGNATURE: / PRINTED NAME: Stephen Huang / COMPANY: AMEC	4/3/14	1500	SIGNATURE: / PRINTED NAME: Denny Ipawan / COMPANY: CEL	4/3/14	15-00
SIGNATURE: / PRINTED NAME: Denny Ipawan / COMPANY: CEL	4/3/14	17.30	SIGNATURE: / PRINTED NAME: Yan Liao / COMPANY: CEL	4/3/14	1730

TOTAL NUMBER OF CONTAINERS: 9

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0279

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/03/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 802

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 802

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0485

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/09/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Pechiney / 106270030
Work Order Number: 14-04-0485

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0485 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/07/14. They were assigned to Work Order 14-04-0485.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0485
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	04/07/14 17:27
		Number of Containers:	11
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#962	14-04-0485-1	04/07/14 09:23	1	Solid
#963	14-04-0485-2	04/07/14 09:24	1	Solid
#964	14-04-0485-3	04/07/14 09:25	1	Solid
705-IV-P/S-CS-001	14-04-0485-4	04/07/14 09:45	1	Other
221-I-P/S-SS-002	14-04-0485-5	04/07/14 13:30	1	Solid
221-I-P/S-SS-003	14-04-0485-6	04/07/14 13:35	1	Solid
221-I-P/S-SS-004	14-04-0485-7	04/07/14 13:40	1	Solid
678-IV-P/S-SS-001	14-04-0485-8	04/07/14 13:50	1	Solid
647-IV-P/S-SS-001	14-04-0485-9	04/07/14 13:55	1	Solid
647-IV-P/S-SS-002	14-04-0485-10	04/07/14 14:00	1	Solid
#861-5	14-04-0485-11	04/07/14 14:20	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0485
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/07/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
221-I-P/S-SS-002 (14-04-0485-5)						
Aroclor-1248	800		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	190		50	ug/kg	EPA 8082	EPA 3540C
221-I-P/S-SS-003 (14-04-0485-6)						
Aroclor-1248	260		250	ug/kg	EPA 8082	EPA 3540C
221-I-P/S-SS-004 (14-04-0485-7)						
Aroclor-1248	470		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	100		50	ug/kg	EPA 8082	EPA 3540C
647-IV-P/S-SS-001 (14-04-0485-9)						
Aroclor-1248	72		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#962	**14-04-0485-1-A**	**04/07/14 09:23**	**Solid**	**GC 31**	**04/07/14**	**04/08/14 23:17**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

#963	**14-04-0485-2-A**	**04/07/14 09:24**	**Solid**	**GC 31**	**04/07/14**	**04/08/14 23:36**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#964	**14-04-0485-3-A**	**04/07/14 09:25**	**Solid**	**GC 31**	**04/07/14**	**04/08/14 23:55**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

705-IV-P/S-CS-001	**14-04-0485-4-A**	**04/07/14 09:45**	**Other**	**GC 31**	**04/07/14**	**04/09/14 00:14**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
221-I-P/S-SS-002	**14-04-0485-5-A**	**04/07/14 13:30**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 00:33**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	800	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	190	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

221-I-P/S-SS-003	**14-04-0485-6-A**	**04/07/14 13:35**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 13:37**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	250	5.00	
Aroclor-1221	ND	250	5.00	
Aroclor-1232	ND	250	5.00	
Aroclor-1242	ND	250	5.00	
Aroclor-1248	260	250	5.00	
Aroclor-1254	ND	250	5.00	
Aroclor-1260	ND	250	5.00	
Aroclor-1262	ND	250	5.00	
Aroclor-1268	ND	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
221-I-P/S-SS-004	**14-04-0485-7-A**	**04/07/14 13:40**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 01:11**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	470	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	100	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

678-IV-P/S-SS-001	**14-04-0485-8-A**	**04/07/14 13:50**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 01:30**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-SS-001	**14-04-0485-9-A**	**04/07/14 13:55**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 01:49**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	72	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

647-IV-P/S-SS-002	**14-04-0485-10-A**	**04/07/14 14:00**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 02:08**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#861-5	**14-04-0485-11-A**	**04/07/14 14:20**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 02:28**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

Method Blank	**099-02-003-227**	**N/A**	**Solid**	**GC 31**	**04/07/14**	**04/08/14 22:39**	**140407L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
678-IV-P/S-SS-001	**Sample**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 01:30**	**140407S17**
678-IV-P/S-SS-001	**Matrix Spike**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 02:47**	**140407S17**
678-IV-P/S-SS-001	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/07/14**	**04/09/14 03:06**	**140407S17**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	110.1	110	111.6	112	50-135	1	0-25	
Aroclor-1260	ND	100.0	106.8	107	111.2	111	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-227	**LCS**	**Solid**	**GC 31**	**04/07/14**	**04/08/14 22:20**	**140407L17**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	111.8	112	50-135	
Aroclor-1260	100.0	109.4	109	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0485

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0485

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31306

PROJECT NAME: PECHINEY			DATE: 4/7/14 PAGE 1 OF 1
PROJECT NUMBER: 10627 0030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 14-04-0485
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES: PCBs 8082

	DATE	TIME	SAMPLE NUMBER	PCBs 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/7/14	0923	#962	X	4oz JAR	S			X		1	
2		0924	#963	X		S			X		1	
3		0925	#964	X		S			X		1	
4		0945	705-III-P/S-CS-001	X		O			X		1	
5		1320	221-I-P/S-SS-002	X		S			X		1	
6		1335	221-I-P/S-SS-003	X		S			X		1	
7		1340	221-I-P/S-SS-004	X		S			X		1	
8		1350	678-IV-P/S-SS-001	X		S			X		1	
9		1355	647-IV-P/S-SS-001	X		S			X		1	
10		1400	647-IV-P/S-SS-002	X		S			X		1	
11	4/7/14	1420	#861-5	X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Ken Curnutt COMPANY: AMEC	4/7/14	1420	SIGNATURE: [signature] PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/7/14	1420
SIGNATURE: [signature] PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/7/14	1525	SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/7/14	1525
SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/7/14	1727	SIGNATURE: [signature] PRINTED NAME: GREG SORIANO COMPANY: CEL	4/7/14	1727

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0485

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/7/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0485

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/11/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-0485

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0485 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/07/14. They were assigned to Work Order 14-04-0485.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0485
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	04/07/14 17:27
		Number of Containers:	11
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#861-5	14-04-0485-11	04/07/14 14:20	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0485
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/07/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#861-5 (14-04-0485-11)						
Arsenic	2.01		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	115		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.333		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	25.9		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.31		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	30.8		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	24.6		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	20.1		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.8		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	77.2		0.990	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#861-5	**14-04-0485-11-A**	**04/07/14 14:20**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 19:25**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	2.01	0.743	0.990	
Barium	115	0.495	0.990	
Beryllium	0.333	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	25.9	0.248	0.990	
Cobalt	9.31	0.248	0.990	
Copper	30.8	0.495	0.990	
Lead	24.6	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	20.1	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	29.8	0.248	0.990	
Zinc	77.2	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18257**	**N/A**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:44**	**140410L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#861-5	**14-04-0485-11-A**	**04/07/14 14:20**	**Solid**	**Mercury 04**	**04/10/14**	**04/10/14 17:19**	**140410L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Method Blank	**099-16-272-157**	**N/A**	**Solid**	**Mercury 04**	**04/10/14**	**04/10/14 17:13**	**140410L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0608-12	**Sample**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:47**	**140410S01**
14-04-0608-12	**Matrix Spike**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:48**	**140410S01**
14-04-0608-12	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:49**	**140410S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	3.113	12	4.400	18	50-115	34	0-20	3,4
Arsenic	5.651	25.00	31.13	102	30.77	100	75-125	1	0-20	
Barium	155.6	25.00	176.9	4X	182.8	4X	75-125	4X	0-20	Q
Beryllium	0.3825	25.00	26.92	106	26.81	106	75-125	0	0-20	
Cadmium	ND	25.00	24.79	99	24.79	99	75-125	0	0-20	
Chromium	104.4	25.00	132.5	4X	132.0	4X	75-125	4X	0-20	Q
Cobalt	19.95	25.00	45.12	101	44.11	97	75-125	2	0-20	
Copper	33.36	25.00	57.72	97	58.73	102	75-125	2	0-20	
Lead	5.551	25.00	29.10	94	28.55	92	75-125	2	0-20	
Molybdenum	ND	25.00	21.94	88	22.05	88	75-125	1	0-20	
Nickel	204.4	25.00	232.4	4X	232.5	4X	75-125	4X	0-20	Q
Selenium	ND	25.00	19.66	79	19.59	78	75-125	0	0-20	
Silver	ND	12.50	13.07	105	13.08	105	75-125	0	0-20	
Thallium	ND	25.00	16.87	67	18.59	74	75-125	10	0-20	3
Vanadium	51.50	25.00	76.20	99	75.87	97	75-125	0	0-20	
Zinc	59.90	25.00	83.18	93	84.63	99	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0724-1	**Sample**	**Solid**	**Mercury 04**	**04/10/14**	**04/10/14 17:22**	**140410S06**
14-04-0724-1	**Matrix Spike**	**Solid**	**Mercury 04**	**04/10/14**	**04/10/14 17:24**	**140410S06**
14-04-0724-1	**Matrix Spike Duplicate**	**Solid**	**Mercury 04**	**04/10/14**	**04/10/14 18:08**	**140410S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.3492	0.8350	1.262	109	1.239	107	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-04-0608-12	**Sample**	**Solid**	**ICP 7300**	**04/10/14 00:00**	**04/10/14 17:47**	**140410S01**
14-04-0608-12	**PDS**	**Solid**	**ICP 7300**	**04/10/14 00:00**	**04/11/14 14:25**	**140410S01**
14-04-0608-12	**PDSD**	**Solid**	**ICP 7300**	**04/10/14 00:00**	**04/11/14 14:26**	**140410S01**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	21.60	86	21.90	88	75-125	1	0-20	
Arsenic	5.651	25.00	31.70	104	31.13	102	75-125	2	0-20	
Barium	155.6	25.00	178.8	4X	177.1	4X	75-125	4X	0-20	Q
Beryllium	0.3825	25.00	26.03	103	25.62	101	75-125	2	0-20	
Cadmium	ND	25.00	23.99	96	23.57	94	75-125	2	0-20	
Chromium	104.4	25.00	129.3	4X	127.6	4X	75-125	4X	0-20	Q
Cobalt	19.95	25.00	44.67	99	44.25	97	75-125	1	0-20	
Copper	33.36	25.00	59.48	104	58.96	102	75-125	1	0-20	
Lead	5.551	25.00	28.36	91	28.28	91	75-125	0	0-20	
Molybdenum	ND	25.00	24.87	99	24.59	98	75-125	1	0-20	
Nickel	204.4	25.00	230.3	4X	227.6	4X	75-125	4X	0-20	Q
Selenium	ND	25.00	20.73	83	20.27	81	75-125	2	0-20	
Silver	ND	12.50	12.66	101	12.54	100	75-125	1	0-20	
Thallium	ND	25.00	23.30	93	23.13	93	75-125	1	0-20	
Vanadium	51.50	25.00	76.23	99	75.32	95	75-125	1	0-20	
Zinc	59.90	25.00	83.34	94	82.29	90	75-125	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-04-0724-1	**Sample**	**Solid**	**Mercury 04**	**04/10/14 00:00**	**04/10/14 17:22**	**140410S06**
14-04-0724-1	**PDS**	**Solid**	**Mercury 04**	**04/10/14 00:00**	**04/11/14 13:00**	**140410S06**
14-04-0724-1	**PDSD**	**Solid**	**Mercury 04**	**04/10/14 00:00**	**04/11/14 13:02**	**140410S06**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.3492	0.8350	0.9443	71	0.9684	74	75-125	3	0-20	5

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-18257	**LCS**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:46**	**140410L01**
097-01-002-18257	**LCSD**	**Solid**	**ICP 7300**	**04/10/14**	**04/11/14 14:24**	**140410L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Antimony	25.00	26.80	107	26.99	108	80-120	73-127	1	0-20	
Arsenic	25.00	26.09	104	26.57	106	80-120	73-127	2	0-20	
Barium	25.00	26.18	105	26.24	105	80-120	73-127	0	0-20	
Beryllium	25.00	25.75	103	25.82	103	80-120	73-127	0	0-20	
Cadmium	25.00	26.91	108	26.91	108	80-120	73-127	0	0-20	
Chromium	25.00	26.62	106	26.58	106	80-120	73-127	0	0-20	
Cobalt	25.00	28.95	116	29.04	116	80-120	73-127	0	0-20	
Copper	25.00	26.27	105	25.87	103	80-120	73-127	2	0-20	
Lead	25.00	27.05	108	26.88	108	80-120	73-127	1	0-20	
Molybdenum	25.00	27.05	108	27.27	109	80-120	73-127	1	0-20	
Nickel	25.00	28.42	114	28.49	114	80-120	73-127	0	0-20	
Selenium	25.00	23.84	95	24.23	97	80-120	73-127	2	0-20	
Silver	12.50	13.50	108	13.55	108	80-120	73-127	0	0-20	
Thallium	25.00	29.22	117	29.68	119	80-120	73-127	2	0-20	
Vanadium	25.00	25.79	103	25.65	103	80-120	73-127	1	0-20	
Zinc	25.00	26.99	108	26.43	106	80-120	73-127	2	0-20	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	04/07/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0485
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-272-157	**LCS**	**Solid**	**Mercury 04**	**04/10/14**	**04/10/14 17:15**	**140410L06**
099-16-272-157	**LCSD**	**Solid**	**Mercury 04**	**04/10/14**	**04/11/14 12:53**	**140410L06**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.8080	97	0.7914	95	85-121	2	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0485

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 04	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0485

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Thursday, April 10, 2014 1:11 PM
To: Stephen Nowak
Subject: Re: Pechiney / 106270030 / CEL 14-04-0485

Please add analysis for Title 22 metals for sample #861-5 on a 24 hour TAT. Thanks.

Sent from my iPhone

On Apr 9, 2014, at 4:27 PM, "Stephen Nowak" <snowak@calscience.com> wrote:

> Report, EDD, and Invoice are attached.
>
>
> Stephen Nowak
> Project Manager
>
> [cid:image004.jpg@01CF5410.8F3B6CC0]
> 7440 Lincoln Way
> Garden Grove, CA 92841-1427
> (714) 895-5494
> www.calscience.com<http://www.calscience.com/>
>
> [cid:image003.jpg@01CF5410.8F2F85E0]
>
> PRIVACY NOTICE:
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>
>
>
> <image003.jpg>
> <image004.jpg>
> <14-04-0485.pdf>
> <14040485.xls>
> <1298102.pdf>

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CHAIN-OF-CUSTODY RECORD

NB 31306

PROJECT NAME: PECHINEY			DATE: 4/7/14 PAGE 1 OF 1
PROJECT NUMBER: 10627 0030	LABORATORY NAME: OAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS: 14-04-0485
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNUTT

ANALYSES: PCBs 8082

	DATE	TIME	SAMPLE NUMBER	PCBs 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/7/14	0923	#962	X	4oz JAR	S			X		1	
2		0924	#963	X		S			X		1	
3		0925	#964	X		S			X		1	
4		0945	705-III-P/S-CS-001	X		O			X		1	
5		1320	221-I-P/S-SS-002	X		S			X		1	
6		1335	221-I-P/S-SS-003	X		S			X		1	
7		1340	221-I-P/S-SS-004	X		S			X		1	
8		1350	678-IV-P/S-SS-001	X		S			X		1	
9		1355	647-IV-P/S-SS-001	X		S			X		1	
10		1400	647-IV-P/S-SS-002	X		S			X		1	
11	4/7/14	1420	#861-5	X	4oz JAR	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Ken Curnutt COMPANY: AMEC	4/7/14	1420	SIGNATURE: [signature] PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/7/14	1420
SIGNATURE: [signature] PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/7/14	1525	SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/7/14	1525
SIGNATURE: [signature] PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/7/14	1727	SIGNATURE: [signature] PRINTED NAME: GREG SORIANO COMPANY: CEL	4/7/14	1727

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0485

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/7/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0655

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/14/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-0655

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0655 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/09/14. They were assigned to Work Order 14-04-0655.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0655
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	04/09/14 16:51
		Number of Containers:	14
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
715-IV-P/S-CS-001	14-04-0655-1	04/09/14 08:34	1	Other
715-IV-P/S-CS-002	14-04-0655-2	04/09/14 08:40	1	Other
715-IV-P/S-O-001	14-04-0655-3	04/09/14 08:50	1	Other
696-IV-P/S-SS-003	14-04-0655-4	04/09/14 09:30	1	Solid
696-IV-P/S-SS-004	14-04-0655-5	04/09/14 09:40	1	Solid
696-IV-P/S-SS-005	14-04-0655-6	04/09/14 09:45	1	Solid
#951-22	14-04-0655-7	04/09/14 10:40	1	Solid
#951-24	14-04-0655-8	04/09/14 10:43	1	Solid
#954-22	14-04-0655-9	04/09/14 10:46	1	Solid
#954-24	14-04-0655-10	04/09/14 10:48	1	Solid
#960-22	14-04-0655-11	04/09/14 10:54	1	Solid
#960-24	14-04-0655-12	04/09/14 10:55	1	Solid
#961-22	14-04-0655-13	04/09/14 11:00	1	Solid
#961-24	14-04-0655-14	04/09/14 11:02	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0655
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/09/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
715-IV-P/S-O-001 (14-04-0655-3)						
Arsenic	1.72		0.725	mg/kg	EPA 6010B	EPA 3050B
Barium	80.3		0.483	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.291		0.242	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.4		0.242	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.17		0.242	mg/kg	EPA 6010B	EPA 3050B
Copper	13.3		0.483	mg/kg	EPA 6010B	EPA 3050B
Lead	9.87		0.483	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.96		0.242	mg/kg	EPA 6010B	EPA 3050B
Vanadium	25.2		0.242	mg/kg	EPA 6010B	EPA 3050B
Zinc	40.9		0.966	mg/kg	EPA 6010B	EPA 3050B
C17-C18	57		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	180		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	260		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	440		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	580		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	390		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	240		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	94		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2400		25	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	2100		490	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	810		490	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0655
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/09/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
696-IV-P/S-SS-003 (14-04-0655-4)						
C9-C10	190		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	110		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	6.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	9.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	8.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	420		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	98		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	52		50	ug/kg	EPA 8082	EPA 3540C
1,2,4-Trimethylbenzene	73	J	60*	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	110	J	56*	ug/kg	EPA 8260B	EPA 5030C
p/m-Xylene	28	J	27*	ug/kg	EPA 8260B	EPA 5030C
696-IV-P/S-SS-004 (14-04-0655-5)						
C9-C10	46		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	20		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	73		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
n-Butylbenzene	220	J	16*	ug/kg	EPA 8260B	EPA 5030C
sec-Butylbenzene	79	J	58*	ug/kg	EPA 8260B	EPA 5030C
Chloromethane	33	B,J	30*	ug/kg	EPA 8260B	EPA 5030C
p-Isopropyltoluene	150	J	63*	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	100	J	59*	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	110	J	55*	ug/kg	EPA 8260B	EPA 5030C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0655
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 106270030
	Irvine, CA 92617-3094	Received:	04/09/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
696-IV-P/S-SS-005 (14-04-0655-6)						
C9-C10	170		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	98		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	8.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	9.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	390		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	270		51	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	93		51	ug/kg	EPA 8082	EPA 3540C
1,3,5-Trimethylbenzene	190	J	110*	ug/kg	EPA 8260B	EPA 5030C
#951-22 (14-04-0655-7)						
Aroclor-1248	11000		5100	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	630		51	ug/kg	EPA 8082	EPA 3540C
#951-24 (14-04-0655-8)						
Aroclor-1248	1700		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	120		50	ug/kg	EPA 8082	EPA 3540C
#954-22 (14-04-0655-9)						
Aroclor-1248	130		50	ug/kg	EPA 8082	EPA 3540C
#954-24 (14-04-0655-10)						
Aroclor-1248	160		50	ug/kg	EPA 8082	EPA 3540C
#961-22 (14-04-0655-13)						
Aroclor-1248	2800		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	270		50	ug/kg	EPA 8082	EPA 3540C
#961-24 (14-04-0655-14)						
Aroclor-1248	450		51	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-O-001	**14-04-0655-3-A**	**04/09/14 08:50**	**Other**	**GC 46**	**04/10/14**	**04/11/14 01:51**	**140410B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	4.95	
C7	ND	25	4.95	
C8	ND	25	4.95	
C9-C10	ND	25	4.95	
C11-C12	ND	25	4.95	
C13-C14	ND	25	4.95	
C15-C16	ND	25	4.95	
C17-C18	57	25	4.95	
C19-C20	120	25	4.95	
C21-C22	180	25	4.95	
C23-C24	260	25	4.95	
C25-C28	440	25	4.95	
C29-C32	580	25	4.95	
C33-C36	390	25	4.95	
C37-C40	240	25	4.95	
C41-C44	94	25	4.95	
C6-C44 Total	2400	25	4.95	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-003	**14-04-0655-4-A**	**04/09/14 09:30**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 02:09**	**140410B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	190	5.0	1.00	
C11-C12	110	5.0	1.00	
C13-C14	6.6	5.0	1.00	
C15-C16	9.4	5.0	1.00	
C17-C18	17	5.0	1.00	
C19-C20	15	5.0	1.00	
C21-C22	13	5.0	1.00	
C23-C24	11	5.0	1.00	
C25-C28	12	5.0	1.00	
C29-C32	14	5.0	1.00	
C33-C36	11	5.0	1.00	
C37-C40	8.1	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	420	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-004	**14-04-0655-5-A**	**04/09/14 09:40**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 02:26**	**140410B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	46	5.0	1.00	
C11-C12	20	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	73	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	80	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-005	**14-04-0655-6-A**	**04/09/14 09:45**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 02:44**	**140410B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	170	5.0	0.990	
C11-C12	98	5.0	0.990	
C13-C14	8.4	5.0	0.990	
C15-C16	9.4	5.0	0.990	
C17-C18	15	5.0	0.990	
C19-C20	16	5.0	0.990	
C21-C22	14	5.0	0.990	
C23-C24	10	5.0	0.990	
C25-C28	12	5.0	0.990	
C29-C32	14	5.0	0.990	
C33-C36	10	5.0	0.990	
C37-C40	11	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	390	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-856**	**N/A**	**Solid**	**GC 46**	**04/10/14**	**04/10/14 23:50**	**140410B08**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	67	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-O-001	**14-04-0655-3-A**	**04/09/14 08:50**	**Other**	**ICP 7300**	**04/09/14**	**04/10/14 15:19**	**140409L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.725	0.966	
Arsenic	1.72	0.725	0.966	
Barium	80.3	0.483	0.966	
Beryllium	0.291	0.242	0.966	
Cadmium	ND	0.483	0.966	
Chromium	10.4	0.242	0.966	
Cobalt	7.17	0.242	0.966	
Copper	13.3	0.483	0.966	
Lead	9.87	0.483	0.966	
Molybdenum	ND	0.242	0.966	
Nickel	7.96	0.242	0.966	
Selenium	ND	0.725	0.966	
Silver	ND	0.242	0.966	
Thallium	ND	0.725	0.966	
Vanadium	25.2	0.242	0.966	
Zinc	40.9	0.966	0.966	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18256**	**N/A**	**Solid**	**ICP 7300**	**04/09/14**	**04/09/14 17:54**	**140409L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-O-001	**14-04-0655-3-A**	**04/09/14 08:50**	**Other**	**Mercury 05**	**04/09/14**	**04/10/14 11:50**	**140409L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Method Blank	**099-16-272-155**	**N/A**	**Solid**	**Mercury 05**	**04/09/14**	**04/09/14 12:14**	**140409L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-CS-001	**14-04-0655-1-A**	**04/09/14 08:34**	**Other**	**GC 58**	**04/09/14**	**04/11/14 02:13**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	118	50-130	

715-IV-P/S-CS-002	**14-04-0655-2-A**	**04/09/14 08:40**	**Other**	**GC 58**	**04/09/14**	**04/11/14 02:31**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-O-001	**14-04-0655-3-A**	**04/09/14 08:50**	**Other**	**GC 58**	**04/09/14**	**04/11/14 14:15**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	490	10.0	
Aroclor-1221	ND	490	10.0	
Aroclor-1232	ND	490	10.0	
Aroclor-1242	ND	490	10.0	
Aroclor-1248	2100	490	10.0	
Aroclor-1254	ND	490	10.0	
Aroclor-1260	810	490	10.0	
Aroclor-1262	ND	490	10.0	
Aroclor-1268	ND	490	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

696-IV-P/S-SS-003	**14-04-0655-4-A**	**04/09/14 09:30**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 16:20**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	98	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	52	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	132	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	122	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-004	**14-04-0655-5-A**	**04/09/14 09:40**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 16:38**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	116	50-130	

696-IV-P/S-SS-005	**14-04-0655-6-A**	**04/09/14 09:45**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 16:56**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	270	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	93	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	129	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#951-22	**14-04-0655-7-A**	**04/09/14 10:40**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 04:00**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	630	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

#951-22	**14-04-0655-7-A**	**04/09/14 10:40**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 14:32**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	11000	5100	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#951-24	**14-04-0655-8-A**	**04/09/14 10:43**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 04:18**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	120	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

#951-24	**14-04-0655-8-A**	**04/09/14 10:43**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 14:50**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1700	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#954-22	**14-04-0655-9-A**	**04/09/14 10:46**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 04:37**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	130	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

#954-24	**14-04-0655-10-A**	**04/09/14 10:48**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 04:54**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	160	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#960-22	**14-04-0655-11-A**	**04/09/14 10:54**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 05:12**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

#960-24	**14-04-0655-12-A**	**04/09/14 10:55**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 16:02**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	124	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#961-22	**14-04-0655-13-A**	**04/09/14 11:00**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 05:48**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	270	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	118	50-130	

#961-22	**14-04-0655-13-A**	**04/09/14 11:00**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 15:08**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	2800	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#961-24	**14-04-0655-14-A**	**04/09/14 11:02**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 06:07**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	450	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

Method Blank	**099-02-003-229**	**N/A**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 01:19**	**140409L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-003	**14-04-0655-4-A**	**04/09/14 09:30**	**Solid**	**GC/MS Q**	**04/09/14**	**04/09/14 22:51**	**140409L025**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	13000	630	100	
Benzene	ND	510	13	100	
Bromobenzene	ND	510	21	100	
Bromochloromethane	ND	510	70	100	
Bromodichloromethane	ND	510	24	100	
Bromoform	ND	510	81	100	
Bromomethane	ND	2500	960	100	
2-Butanone	ND	5100	380	100	
n-Butylbenzene	ND	510	16	100	
sec-Butylbenzene	ND	510	59	100	
tert-Butylbenzene	ND	510	15	100	
Carbon Disulfide	ND	5100	31	100	
Carbon Tetrachloride	ND	510	29	100	
Chlorobenzene	ND	510	23	100	
Chloroethane	ND	510	150	100	
Chloroform	ND	510	24	100	
Chloromethane	ND	2500	31	100	
2-Chlorotoluene	ND	510	24	100	
4-Chlorotoluene	ND	510	22	100	
Dibromochloromethane	ND	510	58	100	
1,2-Dibromo-3-Chloropropane	ND	1000	180	100	
1,2-Dibromoethane	ND	510	26	100	
Dibromomethane	ND	510	79	100	
1,2-Dichlorobenzene	ND	510	23	100	
1,3-Dichlorobenzene	ND	510	18	100	
1,4-Dichlorobenzene	ND	510	23	100	
Dichlorodifluoromethane	ND	510	45	100	
1,1-Dichloroethane	ND	510	21	100	
1,2-Dichloroethane	ND	510	32	100	
1,1-Dichloroethene	ND	510	35	100	
c-1,2-Dichloroethene	ND	510	28	100	
t-1,2-Dichloroethene	ND	510	51	100	
1,2-Dichloropropane	ND	510	45	100	
1,3-Dichloropropane	ND	510	26	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 8

Parameter	Result	RL	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	510	34	100	
1,1-Dichloropropene	ND	510	33	100	
c-1,3-Dichloropropene	ND	510	26	100	
t-1,3-Dichloropropene	ND	510	62	100	
Ethylbenzene	ND	510	15	100	
2-Hexanone	ND	5100	180	100	
Isopropylbenzene	ND	510	56	100	
p-Isopropyltoluene	ND	510	64	100	
Methylene Chloride	ND	5100	140	100	
4-Methyl-2-Pentanone	ND	5100	440	100	
Naphthalene	ND	5100	83	100	
n-Propylbenzene	ND	510	51	100	
Styrene	ND	510	61	100	
1,1,1,2-Tetrachloroethane	ND	510	24	100	
1,1,2,2-Tetrachloroethane	ND	510	35	100	
Tetrachloroethene	ND	510	21	100	
Toluene	ND	510	52	100	
1,2,3-Trichlorobenzene	ND	1000	93	100	
1,2,4-Trichlorobenzene	ND	510	32	100	
1,1,1-Trichloroethane	ND	510	23	100	
1,1,2-Trichloroethane	ND	510	36	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5100	36	100	
Trichloroethene	ND	510	31	100	
1,2,3-Trichloropropane	ND	510	84	100	
1,2,4-Trimethylbenzene	73	510	60	100	J
Trichlorofluoromethane	ND	5100	38	100	
1,3,5-Trimethylbenzene	110	510	56	100	J
Vinyl Acetate	ND	5100	480	100	
Vinyl Chloride	ND	510	51	100	
p/m-Xylene	28	510	27	100	J
o-Xylene	ND	510	57	100	
Methyl-t-Butyl Ether (MTBE)	ND	510	30	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	104	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	104	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-004	**14-04-0655-5-A**	**04/09/14 09:40**	**Solid**	**GC/MS Q**	**04/09/14**	**04/09/14 23:16**	**140409L025**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	12000	620	100	
Benzene	ND	500	13	100	
Bromobenzene	ND	500	21	100	
Bromochloromethane	ND	500	69	100	
Bromodichloromethane	ND	500	23	100	
Bromoform	ND	500	79	100	
Bromomethane	ND	2500	940	100	
2-Butanone	ND	5000	380	100	
n-Butylbenzene	220	500	16	100	J
sec-Butylbenzene	79	500	58	100	J
tert-Butylbenzene	ND	500	15	100	
Carbon Disulfide	ND	5000	31	100	
Carbon Tetrachloride	ND	500	28	100	
Chlorobenzene	ND	500	22	100	
Chloroethane	ND	500	150	100	
Chloroform	ND	500	24	100	
Chloromethane	33	2500	30	100	B,J
2-Chlorotoluene	ND	500	23	100	
4-Chlorotoluene	ND	500	21	100	
Dibromochloromethane	ND	500	57	100	
1,2-Dibromo-3-Chloropropane	ND	1000	170	100	
1,2-Dibromoethane	ND	500	26	100	
Dibromomethane	ND	500	77	100	
1,2-Dichlorobenzene	ND	500	23	100	
1,3-Dichlorobenzene	ND	500	18	100	
1,4-Dichlorobenzene	ND	500	22	100	
Dichlorodifluoromethane	ND	500	44	100	
1,1-Dichloroethane	ND	500	21	100	
1,2-Dichloroethane	ND	500	31	100	
1,1-Dichloroethene	ND	500	35	100	
c-1,2-Dichloroethene	ND	500	28	100	
t-1,2-Dichloroethene	ND	500	51	100	
1,2-Dichloropropane	ND	500	44	100	
1,3-Dichloropropane	ND	500	25	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 8

Parameter	Result	RL	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	500	33	100	
1,1-Dichloropropene	ND	500	33	100	
c-1,3-Dichloropropene	ND	500	25	100	
t-1,3-Dichloropropene	ND	500	61	100	
Ethylbenzene	ND	500	15	100	
2-Hexanone	ND	5000	180	100	
Isopropylbenzene	ND	500	55	100	
p-Isopropyltoluene	150	500	63	100	J
Methylene Chloride	ND	5000	130	100	
4-Methyl-2-Pentanone	ND	5000	430	100	
Naphthalene	ND	5000	81	100	
n-Propylbenzene	ND	500	50	100	
Styrene	ND	500	60	100	
1,1,1,2-Tetrachloroethane	ND	500	24	100	
1,1,2,2-Tetrachloroethane	ND	500	35	100	
Tetrachloroethene	ND	500	21	100	
Toluene	ND	500	52	100	
1,2,3-Trichlorobenzene	ND	1000	91	100	
1,2,4-Trichlorobenzene	ND	500	31	100	
1,1,1-Trichloroethane	ND	500	23	100	
1,1,2-Trichloroethane	ND	500	35	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	35	100	
Trichloroethene	ND	500	30	100	
1,2,3-Trichloropropane	ND	500	83	100	
1,2,4-Trimethylbenzene	100	500	59	100	J
Trichlorofluoromethane	ND	5000	38	100	
1,3,5-Trimethylbenzene	110	500	55	100	J
Vinyl Acetate	ND	5000	470	100	
Vinyl Chloride	ND	500	50	100	
p/m-Xylene	ND	500	27	100	
o-Xylene	ND	500	56	100	
Methyl-t-Butyl Ether (MTBE)	ND	500	30	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	104	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	106	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-005	**14-04-0655-6-A**	**04/09/14 09:45**	**Solid**	**GC/MS Q**	**04/09/14**	**04/09/14 23:43**	**140409L025**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	25000	1300	200	
Benzene	ND	1000	26	200	
Bromobenzene	ND	1000	42	200	
Bromochloromethane	ND	1000	140	200	
Bromodichloromethane	ND	1000	47	200	
Bromoform	ND	1000	160	200	
Bromomethane	ND	5000	1900	200	
2-Butanone	ND	10000	760	200	
n-Butylbenzene	ND	1000	32	200	
sec-Butylbenzene	ND	1000	120	200	
tert-Butylbenzene	ND	1000	30	200	
Carbon Disulfide	ND	10000	62	200	
Carbon Tetrachloride	ND	1000	57	200	
Chlorobenzene	ND	1000	45	200	
Chloroethane	ND	1000	300	200	
Chloroform	ND	1000	48	200	
Chloromethane	ND	5000	61	200	
2-Chlorotoluene	ND	1000	47	200	
4-Chlorotoluene	ND	1000	43	200	
Dibromochloromethane	ND	1000	110	200	
1,2-Dibromo-3-Chloropropane	ND	2000	350	200	
1,2-Dibromoethane	ND	1000	51	200	
Dibromomethane	ND	1000	160	200	
1,2-Dichlorobenzene	ND	1000	46	200	
1,3-Dichlorobenzene	ND	1000	36	200	
1,4-Dichlorobenzene	ND	1000	45	200	
Dichlorodifluoromethane	ND	1000	89	200	
1,1-Dichloroethane	ND	1000	43	200	
1,2-Dichloroethane	ND	1000	63	200	
1,1-Dichloroethene	ND	1000	70	200	
c-1,2-Dichloroethene	ND	1000	56	200	
t-1,2-Dichloroethene	ND	1000	100	200	
1,2-Dichloropropane	ND	1000	88	200	
1,3-Dichloropropane	ND	1000	51	200	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 8

Parameter	Result	RL	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1000	67	200	
1,1-Dichloropropene	ND	1000	66	200	
c-1,3-Dichloropropene	ND	1000	51	200	
t-1,3-Dichloropropene	ND	1000	120	200	
Ethylbenzene	ND	1000	31	200	
2-Hexanone	ND	10000	360	200	
Isopropylbenzene	ND	1000	110	200	
p-Isopropyltoluene	ND	1000	130	200	
Methylene Chloride	ND	10000	270	200	
4-Methyl-2-Pentanone	ND	10000	870	200	
Naphthalene	ND	10000	160	200	
n-Propylbenzene	ND	1000	100	200	
Styrene	ND	1000	120	200	
1,1,1,2-Tetrachloroethane	ND	1000	48	200	
1,1,2,2-Tetrachloroethane	ND	1000	70	200	
Tetrachloroethene	ND	1000	42	200	
Toluene	ND	1000	100	200	
1,2,3-Trichlorobenzene	ND	2000	180	200	
1,2,4-Trichlorobenzene	ND	1000	63	200	
1,1,1-Trichloroethane	ND	1000	45	200	
1,1,2-Trichloroethane	ND	1000	71	200	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10000	71	200	
Trichloroethene	ND	1000	61	200	
1,2,3-Trichloropropane	ND	1000	170	200	
1,2,4-Trimethylbenzene	ND	1000	120	200	
Trichlorofluoromethane	ND	10000	76	200	
1,3,5-Trimethylbenzene	190	1000	110	200	J
Vinyl Acetate	ND	10000	960	200	
Vinyl Chloride	ND	1000	100	200	
p/m-Xylene	ND	1000	54	200	
o-Xylene	ND	1000	110	200	
Methyl-t-Butyl Ether (MTBE)	ND	1000	60	200	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	108	60-132	
Dibromofluoromethane	92	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	106	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8367**	**N/A**	**Solid**	**GC/MS Q**	**04/09/14**	**04/09/14 16:12**	**140409L025**

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Acetone	ND	12000	620	100	
Benzene	ND	500	13	100	
Bromobenzene	ND	500	21	100	
Bromochloromethane	ND	500	69	100	
Bromodichloromethane	ND	500	23	100	
Bromoform	ND	500	79	100	
Bromomethane	ND	2500	940	100	
2-Butanone	ND	5000	380	100	
n-Butylbenzene	ND	500	16	100	
sec-Butylbenzene	ND	500	58	100	
tert-Butylbenzene	ND	500	15	100	
Carbon Disulfide	ND	5000	31	100	
Carbon Tetrachloride	ND	500	28	100	
Chlorobenzene	ND	500	22	100	
Chloroethane	ND	500	150	100	
Chloroform	ND	500	24	100	
Chloromethane	51	2500	30	100	J
2-Chlorotoluene	ND	500	23	100	
4-Chlorotoluene	ND	500	21	100	
Dibromochloromethane	ND	500	57	100	
1,2-Dibromo-3-Chloropropane	ND	1000	170	100	
1,2-Dibromoethane	ND	500	26	100	
Dibromomethane	ND	500	77	100	
1,2-Dichlorobenzene	ND	500	23	100	
1,3-Dichlorobenzene	ND	500	18	100	
1,4-Dichlorobenzene	ND	500	22	100	
Dichlorodifluoromethane	ND	500	44	100	
1,1-Dichloroethane	ND	500	21	100	
1,2-Dichloroethane	ND	500	31	100	
1,1-Dichloroethene	ND	500	35	100	
c-1,2-Dichloroethene	ND	500	28	100	
t-1,2-Dichloroethene	ND	500	51	100	
1,2-Dichloropropane	ND	500	44	100	
1,3-Dichloropropane	ND	500	25	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 8 of 8

Parameter	Result	RL	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	500	33	100	
1,1-Dichloropropene	ND	500	33	100	
c-1,3-Dichloropropene	ND	500	25	100	
t-1,3-Dichloropropene	ND	500	61	100	
Ethylbenzene	ND	500	15	100	
2-Hexanone	ND	5000	180	100	
Isopropylbenzene	ND	500	55	100	
p-Isopropyltoluene	ND	500	63	100	
Methylene Chloride	ND	5000	130	100	
4-Methyl-2-Pentanone	ND	5000	430	100	
Naphthalene	ND	5000	81	100	
n-Propylbenzene	ND	500	50	100	
Styrene	ND	500	60	100	
1,1,1,2-Tetrachloroethane	ND	500	24	100	
1,1,2,2-Tetrachloroethane	ND	500	35	100	
Tetrachloroethene	ND	500	21	100	
Toluene	ND	500	52	100	
1,2,3-Trichlorobenzene	ND	1000	91	100	
1,2,4-Trichlorobenzene	ND	500	31	100	
1,1,1-Trichloroethane	ND	500	23	100	
1,1,2-Trichloroethane	ND	500	35	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	35	100	
Trichloroethene	ND	500	30	100	
1,2,3-Trichloropropane	ND	500	83	100	
1,2,4-Trimethylbenzene	ND	500	59	100	
Trichlorofluoromethane	ND	5000	38	100	
1,3,5-Trimethylbenzene	ND	500	55	100	
Vinyl Acetate	ND	5000	470	100	
Vinyl Chloride	ND	500	50	100	
p/m-Xylene	ND	500	27	100	
o-Xylene	ND	500	56	100	
Methyl-t-Butyl Ether (MTBE)	ND	500	30	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	106	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	104	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0673-3	**Sample**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 01:34**	**140410S08**
14-04-0673-3	**Matrix Spike**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 00:25**	**140410S08**
14-04-0673-3	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 00:42**	**140410S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	413.0	103	406.4	102	64-130	2	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0513-2	**Sample**	**Solid**	**ICP 7300**	**04/09/14**	**04/09/14 17:56**	**140409S02**
14-04-0513-2	**Matrix Spike**	**Solid**	**ICP 7300**	**04/09/14**	**04/09/14 17:58**	**140409S02**
14-04-0513-2	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/09/14**	**04/09/14 17:59**	**140409S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	5.528	22	4.461	18	50-115	21	0-20	3,4
Arsenic	1.638	25.00	26.17	98	25.64	96	75-125	2	0-20	
Barium	79.29	25.00	97.62	73	113.2	136	75-125	15	0-20	3
Beryllium	0.6835	25.00	25.84	101	27.45	107	75-125	6	0-20	
Cadmium	ND	25.00	23.47	94	25.08	100	75-125	7	0-20	
Chromium	41.62	25.00	66.18	98	81.11	158	75-125	20	0-20	3
Cobalt	17.45	25.00	43.75	105	51.12	135	75-125	16	0-20	3
Copper	38.14	25.00	64.95	107	65.98	111	75-125	2	0-20	
Lead	8.262	25.00	33.97	103	39.34	124	75-125	15	0-20	
Molybdenum	ND	25.00	21.16	85	21.07	84	75-125	0	0-20	
Nickel	35.23	25.00	64.65	118	80.10	179	75-125	21	0-20	3,4
Selenium	ND	25.00	19.53	78	19.04	76	75-125	3	0-20	
Silver	ND	12.50	12.82	103	13.67	109	75-125	6	0-20	
Thallium	ND	25.00	10.74	43	15.25	61	75-125	35	0-20	3,4
Vanadium	42.53	25.00	68.38	103	74.85	129	75-125	9	0-20	3
Zinc	50.78	25.00	75.54	99	96.09	181	75-125	24	0-20	3,4

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0592-2	**Sample**	**Solid**	**Mercury 05**	**04/09/14**	**04/09/14 12:25**	**140409S02**
14-04-0592-2	**Matrix Spike**	**Solid**	**Mercury 05**	**04/09/14**	**04/09/14 12:27**	**140409S02**
14-04-0592-2	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**04/09/14**	**04/09/14 12:29**	**140409S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8141	97	0.8505	102	71-137	4	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#951-22	**Sample**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 04:00**	**140409S14**
#951-22	**Matrix Spike**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 01:37**	**140409S14**
#951-22	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 01:55**	**140409S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	2728	2728	1211	1211	50-135	77	0-25	3,4
Aroclor-1260	625.2	100.0	613.7	0	345.5	0	50-135	56	0-25	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0537-12	**Sample**	**Solid**	**GC/MS Q**	**04/08/14**	**04/09/14 16:39**	**140409S012**
14-04-0537-12	**Matrix Spike**	**Solid**	**GC/MS Q**	**04/08/14**	**04/09/14 17:05**	**140409S012**
14-04-0537-12	**Matrix Spike Duplicate**	**Solid**	**GC/MS Q**	**04/08/14**	**04/09/14 17:31**	**140409S012**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50000	51440	103	54810	110	61-127	6	0-20	
Carbon Tetrachloride	ND	50000	48460	97	53550	107	51-135	10	0-29	
Chlorobenzene	ND	50000	53120	106	55660	111	57-123	5	0-20	
1,2-Dibromoethane	ND	50000	52250	104	54840	110	64-124	5	0-20	
1,2-Dichlorobenzene	ND	50000	53130	106	55740	111	35-131	5	0-25	
1,2-Dichloroethane	ND	50000	55090	110	58560	117	80-120	6	0-20	
1,1-Dichloroethene	ND	50000	54670	109	58220	116	47-143	6	0-25	
Ethylbenzene	41080	50000	80580	79	89780	97	57-129	11	0-22	
Toluene	33790	50000	75530	83	83400	99	63-123	10	0-20	
Trichloroethene	ND	50000	51280	103	55280	111	44-158	8	0-20	
Vinyl Chloride	ND	50000	65400	131	70440	141	49-139	7	0-47	3
p/m-Xylene	242800	100000	281000	38	322500	80	70-130	14	0-30	3
o-Xylene	95740	50000	125800	60	143600	96	70-130	13	0-30	3
Methyl-t-Butyl Ether (MTBE)	ND	50000	52760	106	57730	115	57-123	9	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-856	**LCS**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 00:07**	**140410B08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	401.9	100	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18256	**LCS**	**Solid**	**ICP 7300**	**04/09/14**	**04/09/14 17:55**	**140409L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.25	105	80-120	73-127	
Arsenic	25.00	25.77	103	80-120	73-127	
Barium	25.00	26.53	106	80-120	73-127	
Beryllium	25.00	25.92	104	80-120	73-127	
Cadmium	25.00	26.65	107	80-120	73-127	
Chromium	25.00	26.85	107	80-120	73-127	
Cobalt	25.00	28.62	114	80-120	73-127	
Copper	25.00	26.30	105	80-120	73-127	
Lead	25.00	26.53	106	80-120	73-127	
Molybdenum	25.00	26.40	106	80-120	73-127	
Nickel	25.00	27.96	112	80-120	73-127	
Selenium	25.00	23.85	95	80-120	73-127	
Silver	12.50	13.69	109	80-120	73-127	
Thallium	25.00	28.61	114	80-120	73-127	
Vanadium	25.00	25.92	104	80-120	73-127	
Zinc	25.00	26.30	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-155	**LCS**	**Solid**	**Mercury 05**	**04/09/14**	**04/09/14 12:16**	**140409L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8983	108	85-121	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-229	**LCS**	**Solid**	**GC 58**	**04/09/14**	**04/11/14 01:01**	**140409L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	115.1	115	50-135	
Aroclor-1260	100.0	116.7	117	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8367	**LCS**	**Solid**	**GC/MS Q**	**04/09/14**	**04/09/14 14:49**	**140409L025**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	52.43	105	78-120	71-127	
Carbon Tetrachloride	50.00	52.40	105	49-139	34-154	
Chlorobenzene	50.00	53.21	106	79-120	72-127	
1,2-Dibromoethane	50.00	52.44	105	80-120	73-127	
1,2-Dichlorobenzene	50.00	53.15	106	75-120	68-128	
1,2-Dichloroethane	50.00	57.69	115	80-120	73-127	
1,1-Dichloroethene	50.00	56.44	113	74-122	66-130	
Ethylbenzene	50.00	52.64	105	76-120	69-127	
Toluene	50.00	52.75	106	77-120	70-127	
Trichloroethene	50.00	53.18	106	80-120	73-127	
Vinyl Chloride	50.00	61.70	123	68-122	59-131	ME
p/m-Xylene	100.0	106.1	106	75-125	67-133	
o-Xylene	50.00	54.35	109	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	53.95	108	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0655

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	669	GC 58	1
EPA 8260B	EPA 5030C	823	GC/MS Q	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0655

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31308

PROJECT NAME: PECHINEY			DATE: 4/9/14 PAGE 1 OF 1
PROJECT NUMBER: 10627 0030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		14-04-0655
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNOT, Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	TEPH 22 ANCHORS	8260 VOCs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/9/14	0834	715-IV-P/S-CS-001	X				4 oz JAR	O			X		1	
2		0840	715-IV-P/S-CS-002	X					O			X		1	
3		0850	715-IV-P/S-O-001	X	X	X			O			X		1	
4		0930	696-IV-P/S-SS-003	X	X		X		S			X		1	
5		0940	696-IV-P/S-SS-004	X	X		X		S			X		1	
6		0945	696-IV-P/S-SS-005	X	X		X		S			X		1	
7		1040	#951-22	X					S			X		1	
8		1043	#951-24	X					S			X		1	
9		1046	#954-22	X					S			X		1	
10		1048	#954-24	X					S			X		1	
11		1054	#960-22	X					S			X		1	
12		1055	#960-24	X					S			X		1	
13		1100	#961-22	X					S			X		1	
14		1102	#961-24	X					S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	4/9/14	1400	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	4/9/14	1400
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	4/9/14	1500	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEC	4/9/14	1500
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEC	4/9/14	1651	SIGNATURE: PRINTED NAME: Noel Cruz COMPANY: CEC	4/9/14	1651

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0655

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/9/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 300

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 300

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 603

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 603

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0655

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/21/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-0655

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0655 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/09/14. They were assigned to Work Order 14-04-0655.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0655
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	04/09/14 16:51
		Number of Containers:	14
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#951-24	14-04-0655-8	04/09/14 10:43	1	Solid
#954-22	14-04-0655-9	04/09/14 10:46	1	Solid
#960-22	14-04-0655-11	04/09/14 10:54	1	Solid
#961-22	14-04-0655-13	04/09/14 11:00	1	Solid

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#951-24	**14-04-0655-8-A**	**04/09/14 10:43**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 04:37**	**140418B04**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.01	
C7	ND	5.0	1.01	
C8	ND	5.0	1.01	
C9-C10	ND	5.0	1.01	
C11-C12	ND	5.0	1.01	
C13-C14	ND	5.0	1.01	
C15-C16	ND	5.0	1.01	
C17-C18	ND	5.0	1.01	
C19-C20	ND	5.0	1.01	
C21-C22	ND	5.0	1.01	
C23-C24	ND	5.0	1.01	
C25-C28	ND	5.0	1.01	
C29-C32	ND	5.0	1.01	
C33-C36	ND	5.0	1.01	
C37-C40	ND	5.0	1.01	
C41-C44	ND	5.0	1.01	
C6-C44 Total	ND	5.0	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#954-22	**14-04-0655-9-A**	**04/09/14 10:46**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 04:54**	**140418B04**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#960-22	**14-04-0655-11-A**	**04/09/14 10:54**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 05:11**	**140418B04**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.02	
C7	ND	5.1	1.02	
C8	ND	5.1	1.02	
C9-C10	ND	5.1	1.02	
C11-C12	ND	5.1	1.02	
C13-C14	ND	5.1	1.02	
C15-C16	ND	5.1	1.02	
C17-C18	ND	5.1	1.02	
C19-C20	ND	5.1	1.02	
C21-C22	ND	5.1	1.02	
C23-C24	ND	5.1	1.02	
C25-C28	ND	5.1	1.02	
C29-C32	ND	5.1	1.02	
C33-C36	ND	5.1	1.02	
C37-C40	ND	5.1	1.02	
C41-C44	ND	5.1	1.02	
C6-C44 Total	ND	5.1	1.02	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	107	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#961-22	**14-04-0655-13-A**	**04/09/14 11:00**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 05:28**	**140418B04**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.01	
C7	ND	5.1	1.01	
C8	ND	5.1	1.01	
C9-C10	ND	5.1	1.01	
C11-C12	ND	5.1	1.01	
C13-C14	ND	5.1	1.01	
C15-C16	ND	5.1	1.01	
C17-C18	ND	5.1	1.01	
C19-C20	ND	5.1	1.01	
C21-C22	ND	5.1	1.01	
C23-C24	ND	5.1	1.01	
C25-C28	ND	5.1	1.01	
C29-C32	ND	5.1	1.01	
C33-C36	ND	5.1	1.01	
C37-C40	ND	5.1	1.01	
C41-C44	ND	5.1	1.01	
C6-C44 Total	ND	5.1	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	103	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-864**	**N/A**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 03:12**	**140418B04**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#951-24	**14-04-0655-8-A**	**04/09/14 10:43**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 20:15**	**140418L029**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	60-132	
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#954-22	**14-04-0655-9-A**	**04/09/14 10:46**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 20:41**	**140418L029**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-132	
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#960-22	**14-04-0655-11-A**	**04/09/14 10:54**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 21:08**	**140418L029**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	60-132	
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#961-22	**14-04-0655-13-A**	**04/09/14 11:00**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 21:34**	**140418L029**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/09/14
121 Innovation Drive, Suite 200	Work Order:	14-04-0655
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 106270030		Page 8 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	103	60-132	
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	110	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8396**	**N/A**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 15:53**	**140418L029**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 106270030			Page 10 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	103	60-132	
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0569-8	**Sample**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 04:20**	**140418S04**
14-04-0569-8	**Matrix Spike**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 03:46**	**140418S04**
14-04-0569-8	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 04:03**	**140418S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	380.1	95	397.5	99	64-130	4	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0569-8	**Sample**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 17:11**	**140418S019**
14-04-0569-8	**Matrix Spike**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 18:57**	**140418S019**
14-04-0569-8	**Matrix Spike Duplicate**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 19:22**	**140418S019**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	47.71	95	47.71	95	61-127	0	0-20	
Carbon Tetrachloride	ND	50.00	50.35	101	52.10	104	51-135	3	0-29	
Chlorobenzene	ND	50.00	48.68	97	49.86	100	57-123	2	0-20	
1,2-Dibromoethane	ND	50.00	49.72	99	49.87	100	64-124	0	0-20	
1,2-Dichlorobenzene	ND	50.00	49.72	99	50.06	100	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	49.50	99	50.19	100	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	49.73	99	50.44	101	47-143	1	0-25	
Ethylbenzene	ND	50.00	49.53	99	49.49	99	57-129	0	0-22	
Toluene	ND	50.00	48.26	97	47.93	96	63-123	1	0-20	
Trichloroethene	ND	50.00	49.69	99	49.89	100	44-158	0	0-20	
Vinyl Chloride	ND	50.00	45.39	91	44.88	90	49-139	1	0-47	
p/m-Xylene	ND	100.0	97.99	98	98.47	98	70-130	0	0-30	
o-Xylene	ND	50.00	49.26	99	49.10	98	70-130	0	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	50.57	101	51.68	103	57-123	2	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-864	**LCS**	**Solid**	**GC 46**	**04/18/14**	**04/19/14 03:29**	**140418B04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	356.8	89	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/09/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0655
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8396	**LCS**	**Solid**	**GC/MS Q**	**04/18/14**	**04/18/14 14:56**	**140418L029**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	53.28	107	78-120	71-127	
Carbon Tetrachloride	50.00	55.50	111	49-139	34-154	
Chlorobenzene	50.00	55.66	111	79-120	72-127	
1,2-Dibromoethane	50.00	53.63	107	80-120	73-127	
1,2-Dichlorobenzene	50.00	57.37	115	75-120	68-128	
1,2-Dichloroethane	50.00	53.66	107	80-120	73-127	
1,1-Dichloroethene	50.00	56.18	112	74-122	66-130	
Ethylbenzene	50.00	55.23	110	76-120	69-127	
Toluene	50.00	53.92	108	77-120	70-127	
Trichloroethene	50.00	55.53	111	80-120	73-127	
Vinyl Chloride	50.00	52.08	104	68-122	59-131	
p/m-Xylene	100.0	110.3	110	75-125	67-133	
o-Xylene	50.00	55.93	112	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	54.80	110	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0655

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8260B	EPA 5030C	823	GC/MS Q	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0655

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Friday, April 18, 2014 11:10 AM
To: Stephen Nowak
Cc: Conlan, Linda
Subject: RE: Pechiney / 0106270030 / CEL 14-04-0569

Hi, Steve:

Please run 8260 and 8015 on the following samples: #951-24, #954-22, #960-22, #961-22, and #967-24 on a 24-Hour TAT. Thanks,

Kim

From: Stephen Nowak [mailto:snowak@calscience.com]
Sent: Friday, April 11, 2014 5:09 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Pechiney / 0106270030 / CEL 14-04-0569

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience

7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com

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CHAIN-OF-CUSTODY RECORD

NB 31308

PROJECT NAME: PECHINEY			DATE: 4/9/14 PAGE 1 OF 1
PROJECT NUMBER: 10627 0030	LABORATORY NAME: CAL SCIENCE	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		14-04-0655
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURNOT, Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	TEPH 22 ANCHORS	8260 VOCs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/9/14	0834	715-IV-P/S-CS-001	X				4 oz JAR	O			X		1	
2		0840	715-IV-P/S-CS-002	X					O			X		1	
3		0850	715-IV-P/S-O-001	X	X	X			O			X		1	
4		0930	696-IV-P/S-SS-003	X	X		X		S			X		1	
5		0940	696-IV-P/S-SS-004	X	X		X		S			X		1	
6		0945	696-IV-P/S-SS-005	X	X		X		S			X		1	
7		1040	#951-22	X					S			X		1	
8		1043	#951-24	X					S			X		1	
9		1046	#954-22	X					S			X		1	
10		1048	#954-24	X					S			X		1	
11		1054	#960-22	X					S			X		1	
12		1055	#960-24	X					S			X		1	
13		1100	#961-22	X					S			X		1	
14		1102	#961-24	X					S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	4/9/14	1400	SIGNATURE: PRINTED NAME: STEPHEN Hung COMPANY: AMEC	4/9/14	1400
SIGNATURE: PRINTED NAME: STEPHEN Hung COMPANY: AMEC	4/9/14	1500	SIGNATURE: PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/9/14	1500
SIGNATURE: PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/9/14	1651	SIGNATURE: PRINTED NAME: Noel Cruz COMPANY: CEL	4/9/14	1651

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0655

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/9/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 300

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 300

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 603

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 603

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0771

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/16/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-0771

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0771 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/10/14. They were assigned to Work Order 14-04-0771.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0771
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/10/14 17:49
		Number of Containers:	5
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
647-IV-P/S-SS-003	14-04-0771-1	04/10/14 13:30	1	Solid
DC-421	14-04-0771-2	04/10/14 14:15	1	Other
DC-422	14-04-0771-3	04/10/14 14:20	1	Other
722-IV-P/S-CS-001	14-04-0771-4	04/10/14 14:40	1	Other
722-IV-P/S-O-001	14-04-0771-5	04/10/14 14:43	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0771
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/10/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
DC-421 (14-04-0771-2)						
Aroclor-1248	62		50	ug/kg	EPA 8082	EPA 3540C
722-IV-P/S-CS-001 (14-04-0771-4)						
Aroclor-1248	52		50	ug/kg	EPA 8082	EPA 3540C
722-IV-P/S-O-001 (14-04-0771-5)						
Arsenic	7.72		0.728	mg/kg	EPA 6010B	EPA 3050B
Barium	312		0.485	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.566		0.243	mg/kg	EPA 6010B	EPA 3050B
Cadmium	6.28		0.485	mg/kg	EPA 6010B	EPA 3050B
Chromium	55.3		0.243	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.2		0.243	mg/kg	EPA 6010B	EPA 3050B
Copper	623		0.485	mg/kg	EPA 6010B	EPA 3050B
Lead	10400		4.85	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	3.47		0.243	mg/kg	EPA 6010B	EPA 3050B
Nickel	29.7		0.243	mg/kg	EPA 6010B	EPA 3050B
Vanadium	25.4		0.243	mg/kg	EPA 6010B	EPA 3050B
Zinc	1510		0.971	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.181		0.0862	mg/kg	EPA 7471A	EPA 7471A Total
C17-C18	140		130	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	190		130	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	490		130	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	360		130	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	740		130	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	880		130	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	640		130	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	570		130	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	240		130	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	4200		130	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	5300		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	27000		5000	ug/kg	EPA 8082	EPA 3540C
Acetone	150		120	ug/kg	EPA 8260B	EPA 5030C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
722-IV-P/S-O-001	**14-04-0771-5-A**	**04/10/14 14:43**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 03:38**	**140410B08**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	130	25.1	
C7	ND	130	25.1	
C8	ND	130	25.1	
C9-C10	ND	130	25.1	
C11-C12	ND	130	25.1	
C13-C14	ND	130	25.1	
C15-C16	ND	130	25.1	
C17-C18	140	130	25.1	
C19-C20	190	130	25.1	
C21-C22	490	130	25.1	
C23-C24	360	130	25.1	
C25-C28	740	130	25.1	
C29-C32	880	130	25.1	
C33-C36	640	130	25.1	
C37-C40	570	130	25.1	
C41-C44	240	130	25.1	
C6-C44 Total	4200	130	25.1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	107	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-856**	**N/A**	**Solid**	**GC 46**	**04/10/14**	**04/10/14 23:50**	**140410B08**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	67	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
722-IV-P/S-O-001	**14-04-0771-5-A**	**04/10/14 14:43**	**Solid**	**ICP 7300**	**04/10/14**	**04/11/14 15:33**	**140410L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.728	0.971	
Arsenic	7.72	0.728	0.971	
Barium	312	0.485	0.971	
Beryllium	0.566	0.243	0.971	
Cadmium	6.28	0.485	0.971	
Chromium	55.3	0.243	0.971	
Cobalt	11.2	0.243	0.971	
Copper	623	0.485	0.971	
Molybdenum	3.47	0.243	0.971	
Nickel	29.7	0.243	0.971	
Selenium	ND	0.728	0.971	
Silver	ND	0.243	0.971	
Thallium	ND	0.728	0.971	
Vanadium	25.4	0.243	0.971	
Zinc	1510	0.971	0.971	

722-IV-P/S-O-001	**14-04-0771-5-A**	**04/10/14 14:43**	**Solid**	**ICP 7300**	**04/10/14**	**04/11/14 17:21**	**140410L02**

Parameter	Result	RL	DF	Qualifiers
Lead	10400	4.85	9.71	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18258**	**N/A**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:32**	**140410L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
722-IV-P/S-O-001	**14-04-0771-5-A**	**04/10/14 14:43**	**Solid**	**Mercury 05**	**04/11/14**	**04/11/14 12:49**	**140411L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.181	0.0862	1.00	

Method Blank	**099-16-272-158**	**N/A**	**Solid**	**Mercury**	**04/11/14**	**04/11/14 12:35**	**140411L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
647-IV-P/S-SS-003	**14-04-0771-1-A**	**04/10/14 13:30**	**Solid**	**GC 31**	**04/10/14**	**04/14/14 13:03**	**140410L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

DC-421	**14-04-0771-2-A**	**04/10/14 14:15**	**Other**	**GC 31**	**04/10/14**	**04/14/14 13:22**	**140410L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	62	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-422	**14-04-0771-3-A**	**04/10/14 14:20**	**Other**	**GC 31**	**04/10/14**	**04/11/14 23:12**	**140410L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

722-IV-P/S-CS-001	**14-04-0771-4-A**	**04/10/14 14:40**	**Other**	**GC 31**	**04/10/14**	**04/14/14 13:42**	**140410L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	52	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	529	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
722-IV-P/S-O-001	**14-04-0771-5-A**	**04/10/14 14:43**	**Solid**	**GC 31**	**04/10/14**	**04/12/14 00:28**	**140410L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1248	5300	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	ND	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	27000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	1527	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

Method Blank	**099-02-003-230**	**N/A**	**Solid**	**GC 31**	**04/10/14**	**04/11/14 22:15**	**140410L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
722-IV-P/S-O-001	**14-04-0771-5-A**	**04/10/14 14:43**	**Solid**	**GC/MS Q**	**04/10/14**	**04/10/14 20:41**	**140410L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	150	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	60-132	
Dibromofluoromethane	118	63-141	
1,2-Dichloroethane-d4	142	62-146	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8373**	**N/A**	**Solid**	**GC/MS Q**	**04/10/14**	**04/10/14 15:52**	**140410L017**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/10/14
121 Innovation Drive, Suite 200	Work Order:	14-04-0771
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 0106270030		Page 4 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-132	
Dibromofluoromethane	109	63-141	
1,2-Dichloroethane-d4	125	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0673-3	**Sample**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 01:34**	**140410S08**
14-04-0673-3	**Matrix Spike**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 00:25**	**140410S08**
14-04-0673-3	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 00:42**	**140410S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	413.0	103	406.4	102	64-130	2	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0638-5	**Sample**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:36**	**140410S02**
14-04-0638-5	**Matrix Spike**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:37**	**140410S02**
14-04-0638-5	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:38**	**140410S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	23.51	94	25.47	102	50-115	8	0-20	
Arsenic	1.822	25.00	25.77	96	27.85	104	75-125	8	0-20	
Barium	4.432	25.00	29.13	99	30.82	106	75-125	6	0-20	
Beryllium	ND	25.00	24.27	97	26.29	105	75-125	8	0-20	
Cadmium	ND	25.00	24.57	98	26.67	107	75-125	8	0-20	
Chromium	29.19	25.00	52.04	91	54.34	101	75-125	4	0-20	
Cobalt	ND	25.00	26.74	107	28.75	115	75-125	7	0-20	
Copper	30.12	25.00	54.07	96	57.21	108	75-125	6	0-20	
Lead	1.374	25.00	25.67	97	27.54	105	75-125	7	0-20	
Molybdenum	ND	25.00	25.29	101	27.23	109	75-125	7	0-20	
Nickel	1.971	25.00	28.22	105	30.45	114	75-125	8	0-20	
Selenium	ND	25.00	22.12	88	24.03	96	75-125	8	0-20	
Silver	ND	12.50	12.86	103	13.92	111	75-125	8	0-20	
Thallium	ND	25.00	18.79	75	24.28	97	75-125	25	0-20	4
Vanadium	1.007	25.00	25.28	97	27.26	105	75-125	8	0-20	
Zinc	2.594	25.00	27.34	99	31.14	114	75-125	13	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0773-1	**Sample**	**Solid**	**Mercury 05**	**04/11/14**	**04/11/14 12:40**	**140411S01**
14-04-0773-1	**Matrix Spike**	**Solid**	**Mercury 05**	**04/11/14**	**04/11/14 12:42**	**140411S01**
14-04-0773-1	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**04/11/14**	**04/11/14 12:44**	**140411S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.09787	0.8350	0.8227	87	0.7814	82	71-137	5	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
647-IV-P/S-SS-003	**Sample**	**Solid**	**GC 31**	**04/10/14**	**04/14/14 13:03**	**140410S20**
647-IV-P/S-SS-003	**Matrix Spike**	**Solid**	**GC 31**	**04/10/14**	**04/11/14 22:34**	**140410S20**
647-IV-P/S-SS-003	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/10/14**	**04/11/14 22:53**	**140410S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	110.8	111	109.6	110	50-135	1	0-25	
Aroclor-1260	ND	100.0	132.7	133	127.1	127	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0673-1	**Sample**	**Solid**	**GC/MS Q**	**04/09/14**	**04/10/14 16:44**	**140410S007**
14-04-0673-1	**Matrix Spike**	**Solid**	**GC/MS Q**	**04/09/14**	**04/10/14 18:55**	**140410S007**
14-04-0673-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS Q**	**04/09/14**	**04/10/14 19:21**	**140410S007**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	46.62	93	49.85	100	61-127	7	0-20	
Carbon Tetrachloride	ND	50.00	47.14	94	50.01	100	51-135	6	0-29	
Chlorobenzene	ND	50.00	45.54	91	47.85	96	57-123	5	0-20	
1,2-Dibromoethane	ND	50.00	47.08	94	47.83	96	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	45.87	92	48.40	97	35-131	5	0-25	
1,2-Dichloroethane	ND	50.00	53.54	107	55.13	110	80-120	3	0-20	
1,1-Dichloroethene	ND	50.00	55.54	111	57.96	116	47-143	4	0-25	
Ethylbenzene	ND	50.00	46.49	93	49.13	98	57-129	6	0-22	
Toluene	ND	50.00	46.28	93	49.51	99	63-123	7	0-20	
Trichloroethene	ND	50.00	47.08	94	50.29	101	44-158	7	0-20	
Vinyl Chloride	ND	50.00	59.43	119	65.74	131	49-139	10	0-47	
p/m-Xylene	ND	100.0	90.92	91	96.94	97	70-130	6	0-30	
o-Xylene	ND	50.00	46.49	93	49.16	98	70-130	6	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	52.30	105	53.48	107	57-123	2	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-856	**LCS**	**Solid**	**GC 46**	**04/10/14**	**04/11/14 00:07**	**140410B08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	401.9	100	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18258	**LCS**	**Solid**	**ICP 7300**	**04/10/14**	**04/10/14 17:34**	**140410L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.22	105	80-120	73-127	
Arsenic	25.00	25.55	102	80-120	73-127	
Barium	25.00	26.24	105	80-120	73-127	
Beryllium	25.00	25.47	102	80-120	73-127	
Cadmium	25.00	26.60	106	80-120	73-127	
Chromium	25.00	26.54	106	80-120	73-127	
Cobalt	25.00	28.40	114	80-120	73-127	
Copper	25.00	26.31	105	80-120	73-127	
Lead	25.00	26.61	106	80-120	73-127	
Molybdenum	25.00	26.69	107	80-120	73-127	
Nickel	25.00	27.82	111	80-120	73-127	
Selenium	25.00	23.21	93	80-120	73-127	
Silver	12.50	13.45	108	80-120	73-127	
Thallium	25.00	28.78	115	80-120	73-127	
Vanadium	25.00	25.66	103	80-120	73-127	
Zinc	25.00	26.19	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-158	**LCS**	**Solid**	**Mercury**	**04/11/14**	**04/11/14 12:38**	**140411L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7877	94	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-230	**LCS**	**Solid**	**GC 31**	**04/10/14**	**04/11/14 21:55**	**140410L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	109.2	109	50-135	
Aroclor-1260	100.0	119.3	119	60-130	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8373	**LCS**	**Solid**	**GC/MS Q**	**04/10/14**	**04/10/14 14:54**	**140410L017**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	49.96	100	78-120	71-127	
Carbon Tetrachloride	50.00	49.96	100	49-139	34-154	
Chlorobenzene	50.00	49.81	100	79-120	72-127	
1,2-Dibromoethane	50.00	46.98	94	80-120	73-127	
1,2-Dichlorobenzene	50.00	48.72	97	75-120	68-128	
1,2-Dichloroethane	50.00	52.69	105	80-120	73-127	
1,1-Dichloroethene	50.00	56.31	113	74-122	66-130	
Ethylbenzene	50.00	50.67	101	76-120	69-127	
Toluene	50.00	49.97	100	77-120	70-127	
Trichloroethene	50.00	50.18	100	80-120	73-127	
Vinyl Chloride	50.00	58.60	117	68-122	59-131	
p/m-Xylene	100.0	100.9	101	75-125	67-133	
o-Xylene	50.00	51.08	102	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	50.14	100	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0771

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	823	GC/MS Q	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0771 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31309

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney
DATE: 4-10-14
PAGE 1 OF 1

PROJECT NUMBER: 0106270030
RESULTS TO: Linda Conlan
TURNAROUND TIME: 48 HR
SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience
LABORATORY ADDRESS:
LABORATORY CONTACT: Steve Nowak
LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC Irvine

REPORTING REQUIREMENTS:
14-04-0771

GEOTRACKER REQUIRED YES NO
SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	EPA 8260	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-10-14	1330	647-IV-P/S-SS-003	X				4 oz glass jar	S			X		1	
2		1415	DC-421	X					O			X		1	
3		1420	DC-422	X					O			X		1	
4		1440	722-IV-P/S-CS-001	X					O			X		1	
5		1443	722-IV-P/S-O-ØØ1	X	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/10/14	1300	SIGNATURE: PRINTED NAME: Stephen Rhoney COMPANY: AMEC	4/10/14	1300
SIGNATURE: PRINTED NAME: Stephen Rhoney COMPANY: AMEC	4/10/14	1305	SIGNATURE: Ally Marquez PRINTED NAME: Alex Marquez COMPANY: CEL	4/10/14	1305
SIGNATURE: Ally Marquez PRINTED NAME: Alex Marquez COMPANY: CEL	4/10/14	1749	SIGNATURE: Danny Lz PRINTED NAME: DANNY LZ COMPANY: CEL	4/10/14	1749

TOTAL NUMBER OF CONTAINERS: 5

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0771

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/10/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.8 °C - 0.3 °C (CF) = 2.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐ _____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐ _____ ☐ No (Not Intact) ☑ Not Present Checked by: 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
* ☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels. ☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time ☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 802

Preservative: h: HCL n: HNO_3 na_2:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 802

*(2 to 5) Collection date on label, 4/10/14

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-04-0771

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/21/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Pechiney / 0106270030
Work Order Number: 14-04-0771

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-0771 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/10/14. They were assigned to Work Order 14-04-0771.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-0771
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/10/14 17:49
		Number of Containers:	5
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
722-IV-P/S-O-001	14-04-0771-5	04/10/14 14:43	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-0771
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/10/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
722-IV-P/S-O-001 (14-04-0771-5)						
Lead	701		0.100	mg/L	EPA 6010B	T22.11.5. AII

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
722-IV-P/S-O-001	**14-04-0771-5-A**	**04/10/14 14:43**	**Solid**	**ICP 7300**	**04/17/14**	**04/21/14 12:23**	**140421LA1A**

Parameter	Result	RL	DF	Qualifiers
Lead	701	0.100	1.00	

Method Blank	**097-05-006-7228**	**N/A**	**Aqueous**	**ICP 7300**	**04/17/14**	**04/21/14 12:12**	**140421LA1A**

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1380-1	**Sample**	**Solid**	**ICP 7300**	**04/18/14**	**04/21/14 12:15**	**140421SA1**
14-04-1380-1	**Matrix Spike**	**Solid**	**ICP 7300**	**04/18/14**	**04/21/14 12:16**	**140421SA1**
14-04-1380-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/18/14**	**04/21/14 12:18**	**140421SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	1.628	5.000	6.549	98	6.799	103	75-125	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/10/14
121 Innovation Drive, Suite 200		Work Order:	14-04-0771
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7228	**LCS**	**Aqueous**	**ICP 7300**	**04/17/14**	**04/21/14 12:13**	**140421LA1A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Lead	5.000	5.776	116	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-0771

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	T22.11.5. AII	469	ICP 7300	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-0771 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Thursday, April 17, 2014 7:07 AM
To: Stephen Nowak
Subject: RE: Pechiney / 0106270030 / CEL 14-04-0771

Go ahead with the STLC. I may be able to send in more sample. I will check today.

From: Stephen Nowak [snowak@calscience.com]
Sent: Wednesday, April 16, 2014 4:34 PM
To: Holland, Kim
Subject: RE: Pechiney / 0106270030 / CEL 14-04-0771

Kim-
We only have 60g left of sample- we need 150g for both tests.

We can start the STLC (50g) – do you want us to do that?

Stephen Nowak
Project Manager
(714) 895-5494

The difference is service

From: Holland, Kim [mailto:Kim.Holland@amec.com]
Sent: Wednesday, April 16, 2014 11:38 AM
To: Stephen Nowak
Subject: RE: Pechiney / 0106270030 / CEL 14-04-0771

Please run STLC and TCLP for Pb on sample 722-IV-P/S-O-001. Rush TAT (as much as you can). thanks.

Kim

From: Stephen Nowak [snowak@calscience.com]
Sent: Wednesday, April 16, 2014 10:52 AM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Pechiney / 0106270030 / CEL 14-04-0771

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience

7440 Lincoln Way

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Wednesday, April 16, 2014 11:38 AM
To: Stephen Nowak
Subject: RE: Pechiney / 0106270030 / CEL 14-04-0771

Please run STLC and TCLP for Pb on sample 722-IV-P/S-O-001. Rush TAT (as much as you can). thanks.

Kim

From: Stephen Nowak [snowak@calscience.com]
Sent: Wednesday, April 16, 2014 10:52 AM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Pechiney / 0106270030 / CEL 14-04-0771

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience

7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com

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NB 31309

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney
DATE: 4-10-14
PAGE 1 OF 1

PROJECT NUMBER: 0106270030
RESULTS TO: Linda Conlan
TURNAROUND TIME: 48 HR
SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience
LABORATORY ADDRESS:
LABORATORY CONTACT: Steve Nowak
LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC Irvine

REPORTING REQUIREMENTS:
14-04-0771

GEOTRACKER REQUIRED YES NO
SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	EPA 8260	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-10-14	1330	647-IV-P/S-SS-003	X				4 oz glass jar	S			X		1	
2		1415	DC-421	X					O			X		1	
3		1420	DC-422	X					O			X		1	
4		1440	722-IV-P/S-CS-001	X					O			X		1	
5		1443	722-IV-P/S-O-ØØ1	X	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/10/14	1300	SIGNATURE: PRINTED NAME: Stephen Nwang COMPANY: AMEC	4/10/14	1300
SIGNATURE: PRINTED NAME: Stephen Nwang COMPANY: AMEC	4/10/14	1305	SIGNATURE: Aly Marquez PRINTED NAME: Aly Marquez COMPANY: CEL	4/10/14	1305
SIGNATURE: Aly Marquez PRINTED NAME: Aly Marquez COMPANY: CEL	4/10/14	1749	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CEL	4/10/14	1749

TOTAL NUMBER OF CONTAINERS: 5

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-0771

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/10/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.8 °C - 0.3 °C (CF) = 2.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
* ☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels. ☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time ☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 802

Preservative: h: HCL n: HNO_3 na_2:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 802

*(2 to 5) Collection date on label, 4/10/14

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-1010

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/17/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Former Pechiney Cast Plate / 0106270030
Work Order Number: 14-04-1010

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4 Client Sample Data. 7
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4.2 EPA 8082 PCB Aroclors (Solid). 10
4.3 EPA 8260B Volatile Organics (Solid). 17

5 Quality Control Sample Data. 23
5.1 MS/MSD. 23
5.2 LCS/LCSD. 26

6 Sample Analysis Summary. 29

7 Glossary of Terms and Qualifiers. 30

8 Chain of Custody/Sample Receipt Form. 31

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-1010 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/14/14. They were assigned to Work Order 14-04-1010.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1010
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	04/14/14 16:20
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
728-I-O-SS-001	14-04-1010-1	04/14/14 09:10	1	Solid
#970	14-04-1010-2	04/14/14 11:15	1	Solid
#969	14-04-1010-3	04/14/14 11:13	1	Solid
#971	14-04-1010-4	04/14/14 11:16	1	Solid
#972	14-04-1010-5	04/14/14 11:18	1	Solid
692-IIB-P/S-SS-002	14-04-1010-6	04/14/14 13:48	1	Solid
690-IIB-P/S-SS-002	14-04-1010-7	04/14/14 14:08	1	Solid
696-IV-P/S-SS-006	14-04-1010-8	04/14/14 14:27	1	Solid
696-IV-P/S-SS-007	14-04-1010-9	04/14/14 14:41	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1010
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	04/14/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
728-I-O-SS-001 (14-04-1010-1)						
Aroclor-1248	360		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	53		50	ug/kg	EPA 8082	EPA 3540C
#970 (14-04-1010-2)						
Aroclor-1248	31000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2300		500	ug/kg	EPA 8082	EPA 3540C
#969 (14-04-1010-3)						
Aroclor-1248	27000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1800		500	ug/kg	EPA 8082	EPA 3540C
#971 (14-04-1010-4)						
Aroclor-1248	45000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	3200		500	ug/kg	EPA 8082	EPA 3540C
#972 (14-04-1010-5)						
Aroclor-1248	28000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	3800		500	ug/kg	EPA 8082	EPA 3540C
690-IIB-P/S-SS-002 (14-04-1010-7)						
Aroclor-1248	50		50	ug/kg	EPA 8082	EPA 3540C
696-IV-P/S-SS-006 (14-04-1010-8)						
C8	380		51	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	6400		51	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	1800		51	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	61		51	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	8800		51	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	160		50	ug/kg	EPA 8082	EPA 3540C
n-Butylbenzene	6700		5000	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	15000		5000	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	5200		5000	ug/kg	EPA 8260B	EPA 5030C
696-IV-P/S-SS-007 (14-04-1010-9)						
C8	120		49	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	5600		49	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	2300		49	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	64		49	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	8200		49	mg/kg	EPA 8015B (M)	EPA 3550B
n-Butylbenzene	9400		5000	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	32000		5000	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	18000		5000	ug/kg	EPA 8260B	EPA 5030C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1010
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	04/14/14
Attn:	Linda Conlan		Page 2 of 2

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-006	**14-04-1010-8-A**	**04/14/14 14:27**	**Solid**	**GC 47**	**04/14/14**	**04/15/14 10:27**	**140414B04A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	51	10.1	
C7	ND	51	10.1	
C8	380	51	10.1	
C9-C10	6400	51	10.1	
C11-C12	1800	51	10.1	
C13-C14	ND	51	10.1	
C15-C16	ND	51	10.1	
C17-C18	61	51	10.1	
C19-C20	ND	51	10.1	
C21-C22	ND	51	10.1	
C23-C24	ND	51	10.1	
C25-C28	ND	51	10.1	
C29-C32	ND	51	10.1	
C33-C36	ND	51	10.1	
C37-C40	ND	51	10.1	
C41-C44	ND	51	10.1	
C6-C44 Total	8800	51	10.1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	124	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-007	**14-04-1010-9-A**	**04/14/14 14:41**	**Solid**	**GC 47**	**04/14/14**	**04/15/14 10:44**	**140414B04A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	49	9.80	
C7	ND	49	9.80	
C8	120	49	9.80	
C9-C10	5600	49	9.80	
C11-C12	2300	49	9.80	
C13-C14	64	49	9.80	
C15-C16	ND	49	9.80	
C17-C18	ND	49	9.80	
C19-C20	ND	49	9.80	
C21-C22	ND	49	9.80	
C23-C24	ND	49	9.80	
C25-C28	ND	49	9.80	
C29-C32	ND	49	9.80	
C33-C36	ND	49	9.80	
C37-C40	ND	49	9.80	
C41-C44	ND	49	9.80	
C6-C44 Total	8200	49	9.80	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	122	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-858**	**N/A**	**Solid**	**GC 47**	**04/14/14**	**04/14/14 14:51**	**140414B04A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	139	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
728-I-O-SS-001	**14-04-1010-1-A**	**04/14/14 09:10**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 02:51**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	360	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	53	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

#970	**14-04-1010-2-A**	**04/14/14 11:15**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 11:50**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	2300	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	127	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#970	**14-04-1010-2-A**	**04/14/14 11:15**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 13:45**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	31000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	79	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#969	**14-04-1010-3-A**	**04/14/14 11:13**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 12:09**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	1800	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#969	**14-04-1010-3-A**	**04/14/14 11:13**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 14:04**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	27000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#971	**14-04-1010-4-A**	**04/14/14 11:16**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 12:28**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	3200	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#971	**14-04-1010-4-A**	**04/14/14 11:16**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 14:23**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	45000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#972	**14-04-1010-5-A**	**04/14/14 11:18**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 12:47**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	3800	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	153	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

#972	**14-04-1010-5-A**	**04/14/14 11:18**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 14:42**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	28000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	131	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
692-IIB-P/S-SS-002	**14-04-1010-6-A**	**04/14/14 13:48**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 04:26**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

690-IIB-P/S-SS-002	**14-04-1010-7-A**	**04/14/14 14:08**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 04:45**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	50	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-006	**14-04-1010-8-A**	**04/14/14 14:27**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 05:04**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	160	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

696-IV-P/S-SS-007	**14-04-1010-9-A**	**04/14/14 14:41**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 15:01**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-231**	**N/A**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 02:32**	**140414L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-006	**14-04-1010-8-A**	**04/14/14 14:27**	**Solid**	**GC/MS LL**	**04/14/14**	**04/14/14 21:54**	**140414L030**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120000	500	
Benzene	ND	5000	500	
Bromobenzene	ND	5000	500	
Bromochloromethane	ND	5000	500	
Bromodichloromethane	ND	5000	500	
Bromoform	ND	5000	500	
Bromomethane	ND	25000	500	
2-Butanone	ND	50000	500	
n-Butylbenzene	6700	5000	500	
sec-Butylbenzene	ND	5000	500	
tert-Butylbenzene	ND	5000	500	
Carbon Disulfide	ND	50000	500	
Carbon Tetrachloride	ND	5000	500	
Chlorobenzene	ND	5000	500	
Chloroethane	ND	5000	500	
Chloroform	ND	5000	500	
Chloromethane	ND	25000	500	
2-Chlorotoluene	ND	5000	500	
4-Chlorotoluene	ND	5000	500	
Dibromochloromethane	ND	5000	500	
1,2-Dibromo-3-Chloropropane	ND	10000	500	
1,2-Dibromoethane	ND	5000	500	
Dibromomethane	ND	5000	500	
1,2-Dichlorobenzene	ND	5000	500	
1,3-Dichlorobenzene	ND	5000	500	
1,4-Dichlorobenzene	ND	5000	500	
Dichlorodifluoromethane	ND	5000	500	
1,1-Dichloroethane	ND	5000	500	
1,2-Dichloroethane	ND	5000	500	
1,1-Dichloroethene	ND	5000	500	
c-1,2-Dichloroethene	ND	5000	500	
t-1,2-Dichloroethene	ND	5000	500	
1,2-Dichloropropane	ND	5000	500	
1,3-Dichloropropane	ND	5000	500	
2,2-Dichloropropane	ND	5000	500	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/14/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1010
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5000	500	
c-1,3-Dichloropropene	ND	5000	500	
t-1,3-Dichloropropene	ND	5000	500	
Ethylbenzene	ND	5000	500	
2-Hexanone	ND	50000	500	
Isopropylbenzene	ND	5000	500	
p-Isopropyltoluene	ND	5000	500	
Methylene Chloride	ND	50000	500	
4-Methyl-2-Pentanone	ND	50000	500	
Naphthalene	ND	50000	500	
n-Propylbenzene	ND	5000	500	
Styrene	ND	5000	500	
1,1,1,2-Tetrachloroethane	ND	5000	500	
1,1,2,2-Tetrachloroethane	ND	5000	500	
Tetrachloroethene	ND	5000	500	
Toluene	ND	5000	500	
1,2,3-Trichlorobenzene	ND	10000	500	
1,2,4-Trichlorobenzene	ND	5000	500	
1,1,1-Trichloroethane	ND	5000	500	
1,1,2-Trichloroethane	ND	5000	500	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50000	500	
Trichloroethene	ND	5000	500	
1,2,3-Trichloropropane	ND	5000	500	
1,2,4-Trimethylbenzene	15000	5000	500	
Trichlorofluoromethane	ND	50000	500	
1,3,5-Trimethylbenzene	5200	5000	500	
Vinyl Acetate	ND	50000	500	
Vinyl Chloride	ND	5000	500	
p/m-Xylene	ND	5000	500	
o-Xylene	ND	5000	500	
Methyl-t-Butyl Ether (MTBE)	ND	5000	500	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	108	60-132	
Dibromofluoromethane	88	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	95	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-007	**14-04-1010-9-A**	**04/14/14 14:41**	**Solid**	**GC/MS LL**	**04/14/14**	**04/14/14 22:23**	**140414L030**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120000	500	
Benzene	ND	5000	500	
Bromobenzene	ND	5000	500	
Bromochloromethane	ND	5000	500	
Bromodichloromethane	ND	5000	500	
Bromoform	ND	5000	500	
Bromomethane	ND	25000	500	
2-Butanone	ND	50000	500	
n-Butylbenzene	9400	5000	500	
sec-Butylbenzene	ND	5000	500	
tert-Butylbenzene	ND	5000	500	
Carbon Disulfide	ND	50000	500	
Carbon Tetrachloride	ND	5000	500	
Chlorobenzene	ND	5000	500	
Chloroethane	ND	5000	500	
Chloroform	ND	5000	500	
Chloromethane	ND	25000	500	
2-Chlorotoluene	ND	5000	500	
4-Chlorotoluene	ND	5000	500	
Dibromochloromethane	ND	5000	500	
1,2-Dibromo-3-Chloropropane	ND	9900	500	
1,2-Dibromoethane	ND	5000	500	
Dibromomethane	ND	5000	500	
1,2-Dichlorobenzene	ND	5000	500	
1,3-Dichlorobenzene	ND	5000	500	
1,4-Dichlorobenzene	ND	5000	500	
Dichlorodifluoromethane	ND	5000	500	
1,1-Dichloroethane	ND	5000	500	
1,2-Dichloroethane	ND	5000	500	
1,1-Dichloroethene	ND	5000	500	
c-1,2-Dichloroethene	ND	5000	500	
t-1,2-Dichloroethene	ND	5000	500	
1,2-Dichloropropane	ND	5000	500	
1,3-Dichloropropane	ND	5000	500	
2,2-Dichloropropane	ND	5000	500	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/14/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1010
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5000	500	
c-1,3-Dichloropropene	ND	5000	500	
t-1,3-Dichloropropene	ND	5000	500	
Ethylbenzene	ND	5000	500	
2-Hexanone	ND	50000	500	
Isopropylbenzene	ND	5000	500	
p-Isopropyltoluene	ND	5000	500	
Methylene Chloride	ND	50000	500	
4-Methyl-2-Pentanone	ND	50000	500	
Naphthalene	ND	50000	500	
n-Propylbenzene	ND	5000	500	
Styrene	ND	5000	500	
1,1,1,2-Tetrachloroethane	ND	5000	500	
1,1,2,2-Tetrachloroethane	ND	5000	500	
Tetrachloroethene	ND	5000	500	
Toluene	ND	5000	500	
1,2,3-Trichlorobenzene	ND	9900	500	
1,2,4-Trichlorobenzene	ND	5000	500	
1,1,1-Trichloroethane	ND	5000	500	
1,1,2-Trichloroethane	ND	5000	500	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50000	500	
Trichloroethene	ND	5000	500	
1,2,3-Trichloropropane	ND	5000	500	
1,2,4-Trimethylbenzene	32000	5000	500	
Trichlorofluoromethane	ND	50000	500	
1,3,5-Trimethylbenzene	18000	5000	500	
Vinyl Acetate	ND	50000	500	
Vinyl Chloride	ND	5000	500	
p/m-Xylene	ND	5000	500	
o-Xylene	ND	5000	500	
Methyl-t-Butyl Ether (MTBE)	ND	5000	500	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	60-132	
Dibromofluoromethane	90	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8385**	**N/A**	**Solid**	**GC/MS LL**	**04/14/14**	**04/14/14 15:02**	**140414L030**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	500	50.0	
Bromobenzene	ND	500	50.0	
Bromochloromethane	ND	500	50.0	
Bromodichloromethane	ND	500	50.0	
Bromoform	ND	500	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	5000	50.0	
n-Butylbenzene	ND	500	50.0	
sec-Butylbenzene	ND	500	50.0	
tert-Butylbenzene	ND	500	50.0	
Carbon Disulfide	ND	5000	50.0	
Carbon Tetrachloride	ND	500	50.0	
Chlorobenzene	ND	500	50.0	
Chloroethane	ND	500	50.0	
Chloroform	ND	500	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	500	50.0	
4-Chlorotoluene	ND	500	50.0	
Dibromochloromethane	ND	500	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	500	50.0	
Dibromomethane	ND	500	50.0	
1,2-Dichlorobenzene	ND	500	50.0	
1,3-Dichlorobenzene	ND	500	50.0	
1,4-Dichlorobenzene	ND	500	50.0	
Dichlorodifluoromethane	ND	500	50.0	
1,1-Dichloroethane	ND	500	50.0	
1,2-Dichloroethane	ND	500	50.0	
1,1-Dichloroethene	ND	500	50.0	
c-1,2-Dichloroethene	ND	500	50.0	
t-1,2-Dichloroethene	ND	500	50.0	
1,2-Dichloropropane	ND	500	50.0	
1,3-Dichloropropane	ND	500	50.0	
2,2-Dichloropropane	ND	500	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/14/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1010
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	50.0	
c-1,3-Dichloropropene	ND	500	50.0	
t-1,3-Dichloropropene	ND	500	50.0	
Ethylbenzene	ND	500	50.0	
2-Hexanone	ND	5000	50.0	
Isopropylbenzene	ND	500	50.0	
p-Isopropyltoluene	ND	500	50.0	
Methylene Chloride	ND	5000	50.0	
4-Methyl-2-Pentanone	ND	5000	50.0	
Naphthalene	ND	5000	50.0	
n-Propylbenzene	ND	500	50.0	
Styrene	ND	500	50.0	
1,1,1,2-Tetrachloroethane	ND	500	50.0	
1,1,2,2-Tetrachloroethane	ND	500	50.0	
Tetrachloroethene	ND	500	50.0	
Toluene	ND	500	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	500	50.0	
1,1,1-Trichloroethane	ND	500	50.0	
1,1,2-Trichloroethane	ND	500	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	50.0	
Trichloroethene	ND	500	50.0	
1,2,3-Trichloropropane	ND	500	50.0	
1,2,4-Trimethylbenzene	ND	500	50.0	
Trichlorofluoromethane	ND	5000	50.0	
1,3,5-Trimethylbenzene	ND	500	50.0	
Vinyl Acetate	ND	5000	50.0	
Vinyl Chloride	ND	500	50.0	
p/m-Xylene	ND	500	50.0	
o-Xylene	ND	500	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0936-25	**Sample**	**Solid**	**GC 47**	**04/14/14**	**04/14/14 17:30**	**140414S04**
14-04-0936-25	**Matrix Spike**	**Solid**	**GC 47**	**04/14/14**	**04/14/14 15:25**	**140414S04**
14-04-0936-25	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**04/14/14**	**04/14/14 15:43**	**140414S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	270.2	68	280.8	70	64-130	4	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#971	**Sample**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 12:28**	**140414S18**
#971	**Matrix Spike**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 13:07**	**140414S18**
#971	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 13:26**	**140414S18**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	1000	19680	1968	35930	3593	50-135	58	0-25	3,4
Aroclor-1260	3221	1000	4764	154	4944	172	50-135	4	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0945-3	**Sample**	**Solid**	**GC/MS LL**	**04/14/14**	**04/14/14 15:30**	**140414S021**
14-04-0945-3	**Matrix Spike**	**Solid**	**GC/MS LL**	**04/14/14**	**04/14/14 15:59**	**140414S021**
14-04-0945-3	**Matrix Spike Duplicate**	**Solid**	**GC/MS LL**	**04/14/14**	**04/14/14 16:28**	**140414S021**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	44.73	89	44.00	88	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	42.21	84	41.70	83	51-135	1	0-29	
Chlorobenzene	ND	50.00	48.44	97	45.38	91	57-123	7	0-20	
1,2-Dibromoethane	ND	50.00	46.85	94	44.66	89	64-124	5	0-20	
1,2-Dichlorobenzene	ND	50.00	50.57	101	48.59	97	35-131	4	0-25	
1,2-Dichloroethane	ND	50.00	42.54	85	41.34	83	80-120	3	0-20	
1,1-Dichloroethene	ND	50.00	43.89	88	42.28	85	47-143	4	0-25	
Ethylbenzene	ND	50.00	47.56	95	44.88	90	57-129	6	0-22	
Toluene	ND	50.00	46.25	93	44.31	89	63-123	4	0-20	
Trichloroethene	ND	50.00	55.84	112	57.37	115	44-158	3	0-20	
Vinyl Chloride	ND	50.00	51.18	102	49.03	98	49-139	4	0-47	
p/m-Xylene	ND	100.0	100.7	101	95.23	95	70-130	6	0-30	
o-Xylene	10.07	50.00	60.39	101	55.50	91	70-130	8	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	46.90	94	46.25	93	57-123	1	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-858	**LCS**	**Solid**	**GC 47**	**04/14/14**	**04/14/14 15:08**	**140414B04A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	349.8	87	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-231	**LCS**	**Solid**	**GC 31**	**04/14/14**	**04/16/14 02:12**	**140414L18**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	117.9	118	50-135	
Aroclor-1260	100.0	121.0	121	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/14/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1010
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8385	**LCS**	**Solid**	**GC/MS LL**	**04/14/14**	**04/14/14 13:11**	**140414L030**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	47.28	95	78-120	71-127	
Carbon Tetrachloride	50.00	48.62	97	49-139	34-154	
Chlorobenzene	50.00	50.76	102	79-120	72-127	
1,2-Dibromoethane	50.00	52.26	105	80-120	73-127	
1,2-Dichlorobenzene	50.00	53.20	106	75-120	68-128	
1,2-Dichloroethane	50.00	45.56	91	80-120	73-127	
1,1-Dichloroethene	50.00	46.86	94	74-122	66-130	
Ethylbenzene	50.00	49.87	100	76-120	69-127	
Toluene	50.00	47.99	96	77-120	70-127	
Trichloroethene	50.00	47.36	95	80-120	73-127	
Vinyl Chloride	50.00	53.07	106	68-122	59-131	
p/m-Xylene	100.0	103.5	104	75-125	67-133	
o-Xylene	50.00	53.63	107	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	51.19	102	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-1010

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	876	GC/MS LL	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-1010

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB25755

PROJECT NAME: Former Pechiney Cast Plate		DATE: 4/14/14	PAGE 1 OF 1
PROJECT NUMBER: 01062700030	LABORATORY NAME: Chelsea	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-04-1010
TURNAROUND TIME: 48-HR			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: Steve Nowicki		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	EPA 8260	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4/14/14	0910	728-I-0-SS-001	X			4 oz glass	S		None	X		1	
2		1115	#970	X				S			X		1	
3		1113	#969	X				S			X		1	
4		1116	#971	X				S			X		1	
5		1118	#972	X				S			X		1	
6		1348	692-IIB-P/S-SS-002	X				S			X		1	
7		1408	690-IIB-P/S-SS-002	X				S			X		1	
8		1427	696-IV-P/S-SS-006	X	X	X		S			X		1	
9		1441	696-IV-P/S-SS-007	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/14/14	1507	SIGNATURE: PRINTED NAME: RUDY MIGA COMPANY: CEL	4/14/14	1507
SIGNATURE: Rudy Miga PRINTED NAME: RUDY MIGA COMPANY: CEL	4/14/14	1620	SIGNATURE: PRINTED NAME: SORIANO COMPANY: CEL	4/14/14	1620
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 9

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04- 1 0 1 0

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/14/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 676

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 676

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-1103

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/18/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-1103

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-1103 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/15/14. They were assigned to Work Order 14-04-1103.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1103
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/15/14 17:10
		Number of Containers:	19
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#973	14-04-1103-1	04/15/14 10:04	1	Solid
#974	14-04-1103-2	04/15/14 10:05	1	Solid
#975	14-04-1103-3	04/15/14 10:08	1	Solid
#976	14-04-1103-4	04/15/14 10:10	1	Solid
#977	14-04-1103-5	04/15/14 10:12	1	Solid
#978	14-04-1103-6	04/15/14 10:13	1	Solid
#979	14-04-1103-7	04/15/14 10:15	1	Solid
#980	14-04-1103-8	04/15/14 10:17	1	Solid
#981	14-04-1103-9	04/15/14 10:20	1	Solid
#982	14-04-1103-10	04/15/14 10:21	1	Solid
#965-25	14-04-1103-11	04/15/14 12:57	1	Solid
#966-25	14-04-1103-12	04/15/14 12:58	1	Solid
#968-25	14-04-1103-13	04/15/14 13:01	1	Solid
737-I-P/S-CS-001	14-04-1103-14	04/15/14 13:27	1	Concrete
739-IV-P/S-CS-001	14-04-1103-15	04/15/14 13:43	1	Concrete
742-IV-P/S-CS-001	14-04-1103-16	04/15/14 13:48	1	Concrete
742-IV-P/S-CS-002	14-04-1103-17	04/15/14 13:56	1	Concrete
742-IV-P/S-O-001	14-04-1103-18	04/15/14 14:00	1	Solid
742-IV-P/S-CS-003	14-04-1103-19	04/15/14 14:08	1	Concrete

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1103
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/15/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#973 (14-04-1103-1)						
Arsenic	2.27		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.388		0.251	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.1		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.6		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	37.3		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	10.9		0.503	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.371		0.251	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.9		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.7		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	63.6		1.01	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0816		0.0806	mg/kg	EPA 7471A	EPA 7471A Total
Aroclor-1248	58		50	ug/kg	EPA 8082	EPA 3540C
#974 (14-04-1103-2)						
Arsenic	3.25		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	110		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.332		0.256	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.0		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.50		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	64.8		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	15.7		0.513	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.4		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.1		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	53.2		1.03	mg/kg	EPA 6010B	EPA 3050B
#975 (14-04-1103-3)						
Arsenic	1.04		0.721	mg/kg	EPA 6010B	EPA 3050B
Barium	85.1		0.481	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.281		0.240	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.1		0.240	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.83		0.240	mg/kg	EPA 6010B	EPA 3050B
Copper	18.3		0.481	mg/kg	EPA 6010B	EPA 3050B
Lead	11.2		0.481	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.83		0.240	mg/kg	EPA 6010B	EPA 3050B
Vanadium	24.4		0.240	mg/kg	EPA 6010B	EPA 3050B
Zinc	40.3		0.962	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1103
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/15/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#976 (14-04-1103-4)						
Arsenic	0.883		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	94.9		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.345		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.4		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.59		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	12.8		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	1.81		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.78		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.1		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	40.4		1.02	mg/kg	EPA 6010B	EPA 3050B
#977 (14-04-1103-5)						
Arsenic	1.98		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	114		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.305		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.4		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.11		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	13.1		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	1.69		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.70		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.1		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	45.7		1.01	mg/kg	EPA 6010B	EPA 3050B
#978 (14-04-1103-6)						
Arsenic	1.35		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	126		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.335		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.6		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.7		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	15.6		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	1.45		0.508	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.255		0.254	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.6		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.2		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.8		1.02	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1103
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/15/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#979 (14-04-1103-7)						
Barium	66.2		0.515	mg/kg	EPA 6010B	EPA 3050B
Chromium	6.83		0.258	mg/kg	EPA 6010B	EPA 3050B
Cobalt	5.68		0.258	mg/kg	EPA 6010B	EPA 3050B
Copper	6.85		0.515	mg/kg	EPA 6010B	EPA 3050B
Lead	2.93		0.515	mg/kg	EPA 6010B	EPA 3050B
Nickel	5.42		0.258	mg/kg	EPA 6010B	EPA 3050B
Vanadium	17.8		0.258	mg/kg	EPA 6010B	EPA 3050B
Zinc	32.0		1.03	mg/kg	EPA 6010B	EPA 3050B
#980 (14-04-1103-8)						
Arsenic	0.799		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	77.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Chromium	7.44		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.07		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	7.36		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	2.61		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	5.88		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	19.3		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	32.0		0.990	mg/kg	EPA 6010B	EPA 3050B
#981 (14-04-1103-9)						
Barium	90.1		0.521	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.268		0.260	mg/kg	EPA 6010B	EPA 3050B
Chromium	9.83		0.260	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.62		0.260	mg/kg	EPA 6010B	EPA 3050B
Copper	9.85		0.521	mg/kg	EPA 6010B	EPA 3050B
Lead	2.78		0.521	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.58		0.260	mg/kg	EPA 6010B	EPA 3050B
Vanadium	23.9		0.260	mg/kg	EPA 6010B	EPA 3050B
Zinc	39.4		1.04	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.174		0.0862	mg/kg	EPA 7471A	EPA 7471A Total

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1103
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/15/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#982 (14-04-1103-10)						
Arsenic	0.883		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	86.8		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.283		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.00		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	10.3		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	2.88		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.02		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	24.4		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	41.1		0.995	mg/kg	EPA 6010B	EPA 3050B
#965-25 (14-04-1103-11)						
Aroclor-1248	1700000		250000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	75000		5100	ug/kg	EPA 8082	EPA 3540C
#966-25 (14-04-1103-12)						
Aroclor-1248	360000		51000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	26000		5100	ug/kg	EPA 8082	EPA 3540C
#968-25 (14-04-1103-13)						
Aroclor-1248	510000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	20000		5000	ug/kg	EPA 8082	EPA 3540C
737-I-P/S-CS-001 (14-04-1103-14)						
Aroclor-1248	480		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	550		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	360		50	ug/kg	EPA 8082	EPA 3540C
742-IV-P/S-CS-002 (14-04-1103-17)						
Aroclor-1268	120		50	ug/kg	EPA 8082	EPA 3540C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1103
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/15/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
742-IV-P/S-O-001 (14-04-1103-18)						
Arsenic	5.41		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	240		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	1.04		0.250	mg/kg	EPA 6010B	EPA 3050B
Cadmium	3.60		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	119		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	1710		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	4300		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	4.74		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	45.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Silver	0.536		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	43.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	2210		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.133		0.0847	mg/kg	EPA 7471A	EPA 7471A Total
C29-C32	7.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	6.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	6.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	26		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	440		49	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	3200		490	ug/kg	EPA 8082	EPA 3540C
742-IV-P/S-CS-003 (14-04-1103-19)						
Aroclor-1248	670		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	260		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
742-IV-P/S-O-001	**14-04-1103-18-A**	**04/15/14 14:00**	**Solid**	**GC 46**	**04/15/14**	**04/16/14 12:57**	**140415B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	7.2	5.0	1.00	
C33-C36	6.1	5.0	1.00	
C37-C40	6.5	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	26	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-859**	**N/A**	**Solid**	**GC 46**	**04/15/14**	**04/15/14 10:38**	**140415B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	106	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#973	**14-04-1103-1-A**	**04/15/14 10:04**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 16:57**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	2.27	0.754	1.01	
Barium	129	0.503	1.01	
Beryllium	0.388	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	15.1	0.251	1.01	
Cobalt	10.6	0.251	1.01	
Copper	37.3	0.503	1.01	
Lead	10.9	0.503	1.01	
Molybdenum	0.371	0.251	1.01	
Nickel	11.9	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	33.7	0.251	1.01	
Zinc	63.6	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#974	**14-04-1103-2-A**	**04/15/14 10:05**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 16:58**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	3.25	0.769	1.03	
Barium	110	0.513	1.03	
Beryllium	0.332	0.256	1.03	
Cadmium	ND	0.513	1.03	
Chromium	14.0	0.256	1.03	
Cobalt	9.50	0.256	1.03	
Copper	64.8	0.513	1.03	
Lead	15.7	0.513	1.03	
Molybdenum	ND	0.256	1.03	
Nickel	13.4	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	29.1	0.256	1.03	
Zinc	53.2	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#975	**14-04-1103-3-A**	**04/15/14 10:08**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:03**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.721	0.962	
Arsenic	1.04	0.721	0.962	
Barium	85.1	0.481	0.962	
Beryllium	0.281	0.240	0.962	
Cadmium	ND	0.481	0.962	
Chromium	10.1	0.240	0.962	
Cobalt	7.83	0.240	0.962	
Copper	18.3	0.481	0.962	
Lead	11.2	0.481	0.962	
Molybdenum	ND	0.240	0.962	
Nickel	7.83	0.240	0.962	
Selenium	ND	0.721	0.962	
Silver	ND	0.240	0.962	
Thallium	ND	0.721	0.962	
Vanadium	24.4	0.240	0.962	
Zinc	40.3	0.962	0.962	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 4 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#976	**14-04-1103-4-A**	**04/15/14 10:10**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:04**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	0.883	0.761	1.02	
Barium	94.9	0.508	1.02	
Beryllium	0.345	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	11.4	0.254	1.02	
Cobalt	8.59	0.254	1.02	
Copper	12.8	0.508	1.02	
Lead	1.81	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	8.78	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	29.1	0.254	1.02	
Zinc	40.4	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 5 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#977	**14-04-1103-5-A**	**04/15/14 10:12**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:05**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	1.98	0.758	1.01	
Barium	114	0.505	1.01	
Beryllium	0.305	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	13.4	0.253	1.01	
Cobalt	9.11	0.253	1.01	
Copper	13.1	0.505	1.01	
Lead	1.69	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	9.70	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	32.1	0.253	1.01	
Zinc	45.7	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 6 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#978	**14-04-1103-6-A**	**04/15/14 10:13**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:06**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	1.35	0.761	1.02	
Barium	126	0.508	1.02	
Beryllium	0.335	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	14.6	0.254	1.02	
Cobalt	10.7	0.254	1.02	
Copper	15.6	0.508	1.02	
Lead	1.45	0.508	1.02	
Molybdenum	0.255	0.254	1.02	
Nickel	11.6	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	32.2	0.254	1.02	
Zinc	48.8	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 7 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#979	**14-04-1103-7-A**	**04/15/14 10:15**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:07**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.773	1.03	
Arsenic	ND	0.773	1.03	
Barium	66.2	0.515	1.03	
Beryllium	ND	0.258	1.03	
Cadmium	ND	0.515	1.03	
Chromium	6.83	0.258	1.03	
Cobalt	5.68	0.258	1.03	
Copper	6.85	0.515	1.03	
Lead	2.93	0.515	1.03	
Molybdenum	ND	0.258	1.03	
Nickel	5.42	0.258	1.03	
Selenium	ND	0.773	1.03	
Silver	ND	0.258	1.03	
Thallium	ND	0.773	1.03	
Vanadium	17.8	0.258	1.03	
Zinc	32.0	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 8 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#980	**14-04-1103-8-A**	**04/15/14 10:17**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:08**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	0.799	0.743	0.990	
Barium	77.0	0.495	0.990	
Beryllium	ND	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	7.44	0.248	0.990	
Cobalt	6.07	0.248	0.990	
Copper	7.36	0.495	0.990	
Lead	2.61	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	5.88	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	19.3	0.248	0.990	
Zinc	32.0	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 9 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#981	**14-04-1103-9-A**	**04/15/14 10:20**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:10**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	ND	0.781	1.04	
Barium	90.1	0.521	1.04	
Beryllium	0.268	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	9.83	0.260	1.04	
Cobalt	7.62	0.260	1.04	
Copper	9.85	0.521	1.04	
Lead	2.78	0.521	1.04	
Molybdenum	ND	0.260	1.04	
Nickel	7.58	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	23.9	0.260	1.04	
Zinc	39.4	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 10 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#982	**14-04-1103-10-A**	**04/15/14 10:21**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:11**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	0.883	0.746	0.995	
Barium	86.8	0.498	0.995	
Beryllium	0.283	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	10.1	0.249	0.995	
Cobalt	8.00	0.249	0.995	
Copper	10.3	0.498	0.995	
Lead	2.88	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	8.02	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	24.4	0.249	0.995	
Zinc	41.1	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 11 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
742-IV-P/S-O-001	**14-04-1103-18-A**	**04/15/14 14:00**	**Solid**	**ICP 7300**	**04/15/14**	**04/16/14 17:12**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	5.41	0.750	1.00	
Barium	240	0.500	1.00	
Beryllium	1.04	0.250	1.00	
Cadmium	3.60	0.500	1.00	
Chromium	119	0.250	1.00	
Cobalt	10.2	0.250	1.00	
Copper	1710	0.500	1.00	
Lead	4300	0.500	1.00	
Molybdenum	4.74	0.250	1.00	
Nickel	45.3	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	0.536	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	43.1	0.250	1.00	
Zinc	2210	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 12 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18277**	**N/A**	**Solid**	**ICP 7300**	**04/15/14**	**04/15/14 20:12**	**140415L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#973	**14-04-1103-1-A**	**04/15/14 10:04**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:00**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0816	0.0806	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#974	**14-04-1103-2-A**	**04/15/14 10:05**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:02**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#975	**14-04-1103-3-A**	**04/15/14 10:08**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:04**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#976	**14-04-1103-4-A**	**04/15/14 10:10**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:11**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#977	**14-04-1103-5-A**	**04/15/14 10:12**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:13**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#978	**14-04-1103-6-A**	**04/15/14 10:13**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:16**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#979	**14-04-1103-7-A**	**04/15/14 10:15**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:18**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#980	**14-04-1103-8-A**	**04/15/14 10:17**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:20**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#981	**14-04-1103-9-A**	**04/15/14 10:20**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:22**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.174	0.0862	1.00	

#982	**14-04-1103-10-A**	**04/15/14 10:21**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:25**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

742-IV-P/S-O-001	**14-04-1103-18-A**	**04/15/14 14:00**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 13:27**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.133	0.0847	1.00	

Method Blank	**099-16-272-168**	**N/A**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 12:27**	**140416L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#973	**14-04-1103-1-A**	**04/15/14 10:04**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 10:54**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	58	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

#974	**14-04-1103-2-A**	**04/15/14 10:05**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 11:13**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#975	**14-04-1103-3-A**	**04/15/14 10:08**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 11:32**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

#976	**14-04-1103-4-A**	**04/15/14 10:10**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 11:51**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	ND	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#977	**14-04-1103-5-A**	**04/15/14 10:12**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 12:10**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

#978	**14-04-1103-6-A**	**04/15/14 10:13**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 12:29**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#979	**14-04-1103-7-A**	**04/15/14 10:15**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 12:48**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

#980	**14-04-1103-8-A**	**04/15/14 10:17**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 13:07**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#981	**14-04-1103-9-A**	**04/15/14 10:20**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 13:27**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

#982	**14-04-1103-10-A**	**04/15/14 10:21**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 13:46**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#965-25	**14-04-1103-11-A**	**04/15/14 12:57**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 14:05**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5100	100	
Aroclor-1221	ND	5100	100	
Aroclor-1232	ND	5100	100	
Aroclor-1242	ND	5100	100	
Aroclor-1254	ND	5100	100	
Aroclor-1260	75000	5100	100	
Aroclor-1262	ND	5100	100	
Aroclor-1268	ND	5100	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	598	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	182	50-130	1,2,7

#965-25	**14-04-1103-11-A**	**04/15/14 12:57**	**Solid**	**GC 31**	**04/15/14**	**04/18/14 10:47**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1700000	250000	5000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 7 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#966-25	**14-04-1103-12-A**	**04/15/14 12:58**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 14:24**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5100	100	
Aroclor-1221	ND	5100	100	
Aroclor-1232	ND	5100	100	
Aroclor-1242	ND	5100	100	
Aroclor-1254	ND	5100	100	
Aroclor-1260	26000	5100	100	
Aroclor-1262	ND	5100	100	
Aroclor-1268	ND	5100	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	127	50-130	

#966-25	**14-04-1103-12-A**	**04/15/14 12:58**	**Solid**	**GC 31**	**04/15/14**	**04/18/14 11:07**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	360000	51000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 8 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#968-25	**14-04-1103-13-A**	**04/15/14 13:01**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 14:43**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	20000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	384	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	123	50-130	

#968-25	**14-04-1103-13-A**	**04/15/14 13:01**	**Solid**	**GC 31**	**04/15/14**	**04/18/14 11:26**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	510000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	730	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 9 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
737-I-P/S-CS-001	**14-04-1103-14-A**	**04/15/14 13:27**	**Concrete**	**GC 31**	**04/15/14**	**04/17/14 15:02**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	480	50	1.00	
Aroclor-1254	550	50	1.00	
Aroclor-1260	360	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

739-IV-P/S-CS-001	**14-04-1103-15-A**	**04/15/14 13:43**	**Concrete**	**GC 31**	**04/15/14**	**04/17/14 15:21**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 10 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
742-IV-P/S-CS-001	**14-04-1103-16-A**	**04/15/14 13:48**	**Concrete**	**GC 31**	**04/15/14**	**04/17/14 15:40**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

742-IV-P/S-CS-002	**14-04-1103-17-A**	**04/15/14 13:56**	**Concrete**	**GC 31**	**04/15/14**	**04/17/14 15:59**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	120	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	132	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 11 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
742-IV-P/S-O-001	**14-04-1103-18-A**	**04/15/14 14:00**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 16:18**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	440	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	ND	49	1.00	
Aroclor-1262	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	468	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

742-IV-P/S-O-001	**14-04-1103-18-A**	**04/15/14 14:00**	**Solid**	**GC 31**	**04/15/14**	**04/18/14 11:45**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1268	3200	490	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	294	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 12 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
742-IV-P/S-CS-003	**14-04-1103-19-A**	**04/15/14 14:08**	**Concrete**	**GC 31**	**04/15/14**	**04/18/14 10:28**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	670	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	260	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

Method Blank	**099-02-003-232**	**N/A**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 10:35**	**140415L17**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0513-8	**Sample**	**Solid**	**GC 46**	**04/15/14**	**04/15/14 12:40**	**140415S01**
14-04-0513-8	**Matrix Spike**	**Solid**	**GC 46**	**04/15/14**	**04/15/14 11:29**	**140415S01**
14-04-0513-8	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**04/15/14**	**04/15/14 11:47**	**140415S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	8.865	400.0	408.7	100	390.1	95	64-130	5	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0936-21	**Sample**	**Solid**	**ICP 7300**	**04/15/14**	**04/15/14 20:33**	**140415S02**
14-04-0936-21	**Matrix Spike**	**Solid**	**ICP 7300**	**04/15/14**	**04/15/14 20:34**	**140415S02**
14-04-0936-21	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/15/14**	**04/15/14 20:31**	**140415S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	7.183	29	7.010	28	50-115	2	0-20	3
Arsenic	1.105	25.00	23.67	90	23.75	91	75-125	0	0-20	
Barium	28.00	25.00	50.31	89	49.25	85	75-125	2	0-20	
Beryllium	ND	25.00	24.49	98	24.23	97	75-125	1	0-20	
Cadmium	ND	25.00	24.53	98	24.33	97	75-125	1	0-20	
Chromium	9.703	25.00	31.97	89	32.08	90	75-125	0	0-20	
Cobalt	4.281	25.00	29.93	103	29.64	101	75-125	1	0-20	
Copper	3.842	25.00	29.10	101	28.77	100	75-125	1	0-20	
Lead	3.045	25.00	26.80	95	26.76	95	75-125	0	0-20	
Molybdenum	ND	25.00	21.53	86	21.22	85	75-125	1	0-20	
Nickel	2.983	25.00	27.37	98	27.18	97	75-125	1	0-20	
Selenium	ND	25.00	18.83	75	18.75	75	75-125	0	0-20	
Silver	ND	12.50	11.96	96	11.82	95	75-125	1	0-20	
Thallium	ND	25.00	16.13	65	15.11	60	75-125	7	0-20	3
Vanadium	25.54	25.00	43.89	73	44.96	78	75-125	2	0-20	3
Zinc	11.64	25.00	35.74	96	35.71	96	75-125	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0981-4	**Sample**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 12:38**	**140416S02**
14-04-0981-4	**Matrix Spike**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 12:45**	**140416S02**
14-04-0981-4	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 12:47**	**140416S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8299	99	0.7690	92	71-137	8	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#974	**Sample**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 11:13**	**140415S17**
#974	**Matrix Spike**	**Solid**	**GC 31**	**04/15/14**	**04/18/14 12:04**	**140415S17**
#974	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/15/14**	**04/18/14 12:23**	**140415S17**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	94.24	94	103.2	103	50-135	9	0-25	
Aroclor-1260	ND	100.0	90.02	90	84.23	84	50-135	7	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-859	**LCS**	**Solid**	**GC 46**	**04/15/14**	**04/15/14 10:55**	**140415B01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	419.9	105	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18277	**LCS**	**Solid**	**ICP 7300**	**04/15/14**	**04/15/14 20:19**	**140415L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.76	103	80-120	73-127	
Arsenic	25.00	25.01	100	80-120	73-127	
Barium	25.00	26.13	105	80-120	73-127	
Beryllium	25.00	24.49	98	80-120	73-127	
Cadmium	25.00	26.32	105	80-120	73-127	
Chromium	25.00	26.48	106	80-120	73-127	
Cobalt	25.00	28.35	113	80-120	73-127	
Copper	25.00	25.82	103	80-120	73-127	
Lead	25.00	25.66	103	80-120	73-127	
Molybdenum	25.00	25.45	102	80-120	73-127	
Nickel	25.00	26.82	107	80-120	73-127	
Selenium	25.00	22.82	91	80-120	73-127	
Silver	12.50	12.85	103	80-120	73-127	
Thallium	25.00	26.59	106	80-120	73-127	
Vanadium	25.00	25.65	103	80-120	73-127	
Zinc	25.00	26.02	104	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-168	**LCS**	**Solid**	**Mercury 05**	**04/16/14**	**04/16/14 12:29**	**140416L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8819	106	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/15/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1103
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-232	**LCS**	**Solid**	**GC 31**	**04/15/14**	**04/17/14 10:16**	**140415L17**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	124.5	124	50-135	
Aroclor-1260	100.0	123.3	123	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-1103

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	421	GC 31	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-1103

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31310

PROJECT NAME: Pechiney			DATE: 4-15-14 PAGE 1 OF 2
PROJECT NUMBER: 01062700 30	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-04-1103
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-15-14	1004	#973	X	X	4 oz glass jar	S			X		1	
2		1005	#974	X	X		S			X		1	
3		1008	#975	X	X		S			X		1	
4		1010	#976	X	X		S			X		1	
5		1012	#977	X	X		S			X		1	
6		1013	#978	X	X		S			X		1	
7		1015	#979	X	X		S			X		1	
8		1017	#980	X	X		S			X		1	
9		1020	#981	X	X		S			X		1	
10		1021	#982	X	X		S			X		1	
11		1257	#965-25	X			S			X		1	
12		1258	#966-25	X			S			X		1	
13		1301	#968-25	X			S			X		1	
14		1327	737-I-P/S-CS-001	X			O			X		1	concrete
15		1343	739-IV-P/S-CS-001	X			O			X		1	concrete

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	4/15/14	1410	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	4/15/14	1410
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	4/15/14	1755	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: Calscience	4/15/14	1755
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: CALSCIENCE	4/15/14	1710	SIGNATURE: Dannyle PRINTED NAME: DANNY LE COMPANY: CL	4/15/14	17:10

TOTAL NUMBER OF CONTAINERS: 15/19

SAMPLING COMMENTS: temp blank included

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 31311

PROJECT NAME: Pechiney		DATE: 4-15-14	PAGE 2 OF 2
PROJECT NUMBER: 01062700 30	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		(1103)
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	4-15-14	1348	742-1V-P/S-CS-001	X			4 oz glass jar	O			X		1	concrete
17	↓	1356	742-1V-P/S-CS-002	X				O			X		1	concrete
18		1400	742-1V-P/S-O-ØØ1	X	X	X		S			X		1	
19		1408	742-1V-P/S-CS-003	X				O			X		1	concrete

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/15/14	1410	SIGNATURE: PRINTED NAME: Stephen Anany COMPANY:	4/15/14	1410
SIGNATURE: PRINTED NAME: Stephen Anany COMPANY: AMEC	4/15/14	1555	SIGNATURE: PRINTED NAME: COMPANY: CalScience	3/15/14	1555
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: CALSCIENCE	4/15/14	1710	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CSL	4/15/14	1710

TOTAL NUMBER OF CONTAINERS: 4/19

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-1103

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/15/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

The original report has been revised/corrected.

CALSCIENCE

WORK ORDER NUMBER: 14-04-1245

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/23/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-1245

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-1245 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/16/14. They were assigned to Work Order 14-04-1245.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1245
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/16/14 17:56
		Number of Containers:	7
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
461-I-O-SS-003	14-04-1245-1	04/16/14 10:26	1	Solid
461-I-O-SS-004	14-04-1245-2	04/16/14 10:31	1	Solid
461-I-O-SS-005	14-04-1245-3	04/16/14 10:33	1	Solid
461-I-O-SS-006	14-04-1245-4	04/16/14 10:36	1	Solid
715-IV-P/S-CS-003	14-04-1245-5	04/16/14 13:28	1	Other
715-IV-P/S-O-002	14-04-1245-6	04/16/14 13:30	1	Other
748-IV-P/S-O-001	14-04-1245-7	04/16/14 13:37	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1245
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/16/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
461-I-O-SS-003 (14-04-1245-1)						
Aroclor-1248	170		50	ug/kg	EPA 8082	EPA 3540C
461-I-O-SS-005 (14-04-1245-3)						
Aroclor-1248	210		50	ug/kg	EPA 8082	EPA 3540C
461-I-O-SS-006 (14-04-1245-4)						
Aroclor-1248	100		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	200		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	110		50	ug/kg	EPA 8082	EPA 3540C
715-IV-P/S-CS-003 (14-04-1245-5)						
Aroclor-1248	3200		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	930		500	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1245
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/16/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
715-IV-P/S-O-002 (14-04-1245-6)						
Arsenic	4.85		0.777	mg/kg	EPA 6010B	EPA 3050B
Barium	86.5		0.518	mg/kg	EPA 6010B	EPA 3050B
Chromium	29.6		0.259	mg/kg	EPA 6010B	EPA 3050B
Cobalt	4.63		0.259	mg/kg	EPA 6010B	EPA 3050B
Copper	250		0.518	mg/kg	EPA 6010B	EPA 3050B
Lead	38.3		0.518	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	2.95		0.259	mg/kg	EPA 6010B	EPA 3050B
Nickel	253		0.259	mg/kg	EPA 6010B	EPA 3050B
Vanadium	19.6		0.259	mg/kg	EPA 6010B	EPA 3050B
Zinc	151		1.04	mg/kg	EPA 6010B	EPA 3050B
C9-C10	970		500	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	1100		500	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	530		500	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	640		500	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	3600		500	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	7300		500	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	9600		500	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	15000		500	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	22000		500	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	27000		500	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	13000		500	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	7900		500	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	2900		500	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	110000		500	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	24000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	6200		5000	ug/kg	EPA 8082	EPA 3540C
n-Butylbenzene	1000		510	ug/kg	EPA 8260B	EPA 5030C
p-Isopropyltoluene	630		510	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	3200		510	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	750		510	ug/kg	EPA 8260B	EPA 5030C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1245
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/16/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
748-IV-P/S-O-001 (14-04-1245-7)						
Arsenic	3.36		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	102		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.271		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.44		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	31.2		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	25.7		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	2.50		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	25.5		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	73.8		1.01	mg/kg	EPA 6010B	EPA 3050B
C9-C10	1000		250	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	590		250	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	380		250	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	1100		250	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	1700		250	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	2800		250	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	2600		250	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	2600		250	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	3200		250	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	3800		250	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	3400		250	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	2800		250	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	2300		250	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	28000		250	mg/kg	EPA 8015B (M)	EPA 3550B
n-Butylbenzene	2300		490	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	3800		490	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	1100		490	ug/kg	EPA 8260B	EPA 5030C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-O-002	**14-04-1245-6-A**	**04/16/14 13:30**	**Other**	**GC 48**	**04/17/14**	**04/18/14 00:12**	**140417B15A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	500	99.0	
C7	ND	500	99.0	
C8	ND	500	99.0	
C9-C10	970	500	99.0	
C11-C12	1100	500	99.0	
C13-C14	530	500	99.0	
C15-C16	640	500	99.0	
C17-C18	3600	500	99.0	
C19-C20	7300	500	99.0	
C21-C22	9600	500	99.0	
C23-C24	15000	500	99.0	
C25-C28	22000	500	99.0	
C29-C32	27000	500	99.0	
C33-C36	13000	500	99.0	
C37-C40	7900	500	99.0	
C41-C44	2900	500	99.0	
C6-C44 Total	110000	500	99.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	125	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
748-IV-P/S-O-001	**14-04-1245-7-A**	**04/16/14 13:37**	**Other**	**GC 48**	**04/17/14**	**04/18/14 00:27**	**140417B15A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	250	49.0	
C7	ND	250	49.0	
C8	ND	250	49.0	
C9-C10	1000	250	49.0	
C11-C12	590	250	49.0	
C13-C14	380	250	49.0	
C15-C16	1100	250	49.0	
C17-C18	1700	250	49.0	
C19-C20	2800	250	49.0	
C21-C22	2600	250	49.0	
C23-C24	2600	250	49.0	
C25-C28	3200	250	49.0	
C29-C32	3800	250	49.0	
C33-C36	3400	250	49.0	
C37-C40	2800	250	49.0	
C41-C44	2300	250	49.0	
C6-C44 Total	28000	250	49.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	125	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-862**	**N/A**	**Solid**	**GC 48**	**04/17/14**	**04/17/14 22:20**	**140417B15A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	87	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-O-002	**14-04-1245-6-A**	**04/16/14 13:30**	**Other**	**ICP 7300**	**04/16/14**	**04/17/14 18:25**	**140416L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.777	1.04	
Arsenic	4.85	0.777	1.04	
Barium	86.5	0.518	1.04	
Beryllium	ND	0.259	1.04	
Cadmium	ND	0.518	1.04	
Chromium	29.6	0.259	1.04	
Cobalt	4.63	0.259	1.04	
Copper	250	0.518	1.04	
Lead	38.3	0.518	1.04	
Molybdenum	2.95	0.259	1.04	
Nickel	253	0.259	1.04	
Selenium	ND	0.777	1.04	
Silver	ND	0.259	1.04	
Thallium	ND	0.777	1.04	
Vanadium	19.6	0.259	1.04	
Zinc	151	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
748-IV-P/S-O-001	**14-04-1245-7-A**	**04/16/14 13:37**	**Other**	**ICP 7300**	**04/16/14**	**04/17/14 18:26**	**140416L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	3.36	0.758	1.01	
Barium	102	0.505	1.01	
Beryllium	0.271	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	15.8	0.253	1.01	
Cobalt	8.44	0.253	1.01	
Copper	31.2	0.505	1.01	
Lead	25.7	0.505	1.01	
Molybdenum	2.50	0.253	1.01	
Nickel	25.5	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	28.2	0.253	1.01	
Zinc	73.8	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18280**	**N/A**	**Solid**	**ICP 7300**	**04/16/14**	**04/17/14 11:46**	**140416L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-O-002	**14-04-1245-6-A**	**04/16/14 13:30**	**Other**	**Mercury 04**	**04/17/14**	**04/17/14 13:44**	**140417L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

748-IV-P/S-O-001	**14-04-1245-7-A**	**04/16/14 13:37**	**Other**	**Mercury 04**	**04/17/14**	**04/17/14 13:46**	**140417L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

Method Blank	**099-16-272-171**	**N/A**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 13:31**	**140417L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
461-I-O-SS-003	**14-04-1245-1-A**	**04/16/14 10:26**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 20:22**	**140416L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	170	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

461-I-O-SS-004	**14-04-1245-2-A**	**04/16/14 10:31**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 20:40**	**140416L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
461-I-O-SS-005	**14-04-1245-3-A**	**04/16/14 10:33**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 20:58**	**140416L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	210	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	86	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

461-I-O-SS-006	**14-04-1245-4-A**	**04/16/14 10:36**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 21:16**	**140416L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	100	50	1.00	
Aroclor-1254	200	50	1.00	
Aroclor-1260	110	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-CS-003	**14-04-1245-5-A**	**04/16/14 13:28**	**Other**	**GC 58**	**04/16/14**	**04/18/14 11:52**	**140416L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	3200	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	930	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

715-IV-P/S-O-002	**14-04-1245-6-A**	**04/16/14 13:30**	**Other**	**GC 58**	**04/16/14**	**04/18/14 12:46**	**140416L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1248	24000	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	6200	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
748-IV-P/S-O-001	**14-04-1245-7-A**	**04/16/14 13:37**	**Other**	**GC 58**	**04/16/14**	**04/18/14 12:28**	**140416L20**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	250	5.00	
Aroclor-1221	ND	250	5.00	
Aroclor-1232	ND	250	5.00	
Aroclor-1242	ND	250	5.00	
Aroclor-1248	ND	250	5.00	
Aroclor-1254	ND	250	5.00	
Aroclor-1260	ND	250	5.00	
Aroclor-1262	ND	250	5.00	
Aroclor-1268	ND	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	60-125	
2,4,5,6-Tetrachloro-m-Xylene	537	50-130	1,2,7

Method Blank	**099-02-003-234**	**N/A**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 18:52**	**140416L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
715-IV-P/S-O-002	**14-04-1245-6-A**	**04/16/14 13:30**	**Other**	**GC/MS Q**	**04/16/14**	**04/17/14 04:04**	**140416L045**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	13000	50.0	
Benzene	ND	510	50.0	
Bromobenzene	ND	510	50.0	
Bromochloromethane	ND	510	50.0	
Bromodichloromethane	ND	510	50.0	
Bromoform	ND	510	50.0	
Bromomethane	ND	2600	50.0	
2-Butanone	ND	5100	50.0	
n-Butylbenzene	1000	510	50.0	
sec-Butylbenzene	ND	510	50.0	
tert-Butylbenzene	ND	510	50.0	
Carbon Disulfide	ND	5100	50.0	
Carbon Tetrachloride	ND	510	50.0	
Chlorobenzene	ND	510	50.0	
Chloroethane	ND	510	50.0	
Chloroform	ND	510	50.0	
Chloromethane	ND	2600	50.0	
2-Chlorotoluene	ND	510	50.0	
4-Chlorotoluene	ND	510	50.0	
Dibromochloromethane	ND	510	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	510	50.0	
Dibromomethane	ND	510	50.0	
1,2-Dichlorobenzene	ND	510	50.0	
1,3-Dichlorobenzene	ND	510	50.0	
1,4-Dichlorobenzene	ND	510	50.0	
Dichlorodifluoromethane	ND	510	50.0	
1,1-Dichloroethane	ND	510	50.0	
1,2-Dichloroethane	ND	510	50.0	
1,1-Dichloroethene	ND	510	50.0	
c-1,2-Dichloroethene	ND	510	50.0	
t-1,2-Dichloroethene	ND	510	50.0	
1,2-Dichloropropane	ND	510	50.0	
1,3-Dichloropropane	ND	510	50.0	
2,2-Dichloropropane	ND	510	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	510	50.0	
c-1,3-Dichloropropene	ND	510	50.0	
t-1,3-Dichloropropene	ND	510	50.0	
Ethylbenzene	ND	510	50.0	
2-Hexanone	ND	5100	50.0	
Isopropylbenzene	ND	510	50.0	
p-Isopropyltoluene	630	510	50.0	
Methylene Chloride	ND	5100	50.0	
4-Methyl-2-Pentanone	ND	5100	50.0	
Naphthalene	ND	5100	50.0	
n-Propylbenzene	ND	510	50.0	
Styrene	ND	510	50.0	
1,1,1,2-Tetrachloroethane	ND	510	50.0	
1,1,2,2-Tetrachloroethane	ND	510	50.0	
Tetrachloroethene	ND	510	50.0	
Toluene	ND	510	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	510	50.0	
1,1,1-Trichloroethane	ND	510	50.0	
1,1,2-Trichloroethane	ND	510	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5100	50.0	
Trichloroethene	ND	510	50.0	
1,2,3-Trichloropropane	ND	510	50.0	
1,2,4-Trimethylbenzene	3200	510	50.0	
Trichlorofluoromethane	ND	5100	50.0	
1,3,5-Trimethylbenzene	750	510	50.0	
Vinyl Acetate	ND	5100	50.0	
Vinyl Chloride	ND	510	50.0	
p/m-Xylene	ND	510	50.0	
o-Xylene	ND	510	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	510	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	95	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
748-IV-P/S-O-001	**14-04-1245-7-A**	**04/16/14 13:37**	**Other**	**GC/MS Q**	**04/16/14**	**04/17/14 04:30**	**140416L045**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	490	50.0	
Bromobenzene	ND	490	50.0	
Bromochloromethane	ND	490	50.0	
Bromodichloromethane	ND	490	50.0	
Bromoform	ND	490	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	4900	50.0	
n-Butylbenzene	2300	490	50.0	
sec-Butylbenzene	ND	490	50.0	
tert-Butylbenzene	ND	490	50.0	
Carbon Disulfide	ND	4900	50.0	
Carbon Tetrachloride	ND	490	50.0	
Chlorobenzene	ND	490	50.0	
Chloroethane	ND	490	50.0	
Chloroform	ND	490	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	490	50.0	
4-Chlorotoluene	ND	490	50.0	
Dibromochloromethane	ND	490	50.0	
1,2-Dibromo-3-Chloropropane	ND	980	50.0	
1,2-Dibromoethane	ND	490	50.0	
Dibromomethane	ND	490	50.0	
1,2-Dichlorobenzene	ND	490	50.0	
1,3-Dichlorobenzene	ND	490	50.0	
1,4-Dichlorobenzene	ND	490	50.0	
Dichlorodifluoromethane	ND	490	50.0	
1,1-Dichloroethane	ND	490	50.0	
1,2-Dichloroethane	ND	490	50.0	
1,1-Dichloroethene	ND	490	50.0	
c-1,2-Dichloroethene	ND	490	50.0	
t-1,2-Dichloroethene	ND	490	50.0	
1,2-Dichloropropane	ND	490	50.0	
1,3-Dichloropropane	ND	490	50.0	
2,2-Dichloropropane	ND	490	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/16/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1245
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 0106270030		Page 4 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	490	50.0	
c-1,3-Dichloropropene	ND	490	50.0	
t-1,3-Dichloropropene	ND	490	50.0	
Ethylbenzene	ND	490	50.0	
2-Hexanone	ND	4900	50.0	
Isopropylbenzene	ND	490	50.0	
p-Isopropyltoluene	ND	490	50.0	
Methylene Chloride	ND	4900	50.0	
4-Methyl-2-Pentanone	ND	4900	50.0	
Naphthalene	ND	4900	50.0	
n-Propylbenzene	ND	490	50.0	
Styrene	ND	490	50.0	
1,1,1,2-Tetrachloroethane	ND	490	50.0	
1,1,2,2-Tetrachloroethane	ND	490	50.0	
Tetrachloroethene	ND	490	50.0	
Toluene	ND	490	50.0	
1,2,3-Trichlorobenzene	ND	980	50.0	
1,2,4-Trichlorobenzene	ND	490	50.0	
1,1,1-Trichloroethane	ND	490	50.0	
1,1,2-Trichloroethane	ND	490	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	4900	50.0	
Trichloroethene	ND	490	50.0	
1,2,3-Trichloropropane	ND	490	50.0	
1,2,4-Trimethylbenzene	3800	490	50.0	
Trichlorofluoromethane	ND	4900	50.0	
1,3,5-Trimethylbenzene	1100	490	50.0	
Vinyl Acetate	ND	4900	50.0	
Vinyl Chloride	ND	490	50.0	
p/m-Xylene	ND	490	50.0	
o-Xylene	ND	490	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	490	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8392**	**N/A**	**Solid**	**GC/MS Q**	**04/16/14**	**04/17/14 03:37**	**140416L045**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	500	50.0	
Bromobenzene	ND	500	50.0	
Bromochloromethane	ND	500	50.0	
Bromodichloromethane	ND	500	50.0	
Bromoform	ND	500	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	5000	50.0	
n-Butylbenzene	ND	500	50.0	
sec-Butylbenzene	ND	500	50.0	
tert-Butylbenzene	ND	500	50.0	
Carbon Disulfide	ND	5000	50.0	
Carbon Tetrachloride	ND	500	50.0	
Chlorobenzene	ND	500	50.0	
Chloroethane	ND	500	50.0	
Chloroform	ND	500	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	500	50.0	
4-Chlorotoluene	ND	500	50.0	
Dibromochloromethane	ND	500	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	500	50.0	
Dibromomethane	ND	500	50.0	
1,2-Dichlorobenzene	ND	500	50.0	
1,3-Dichlorobenzene	ND	500	50.0	
1,4-Dichlorobenzene	ND	500	50.0	
Dichlorodifluoromethane	ND	500	50.0	
1,1-Dichloroethane	ND	500	50.0	
1,2-Dichloroethane	ND	500	50.0	
1,1-Dichloroethene	ND	500	50.0	
c-1,2-Dichloroethene	ND	500	50.0	
t-1,2-Dichloroethene	ND	500	50.0	
1,2-Dichloropropane	ND	500	50.0	
1,3-Dichloropropane	ND	500	50.0	
2,2-Dichloropropane	ND	500	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/16/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1245
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 0106270030		Page 6 of 6

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	50.0	
c-1,3-Dichloropropene	ND	500	50.0	
t-1,3-Dichloropropene	ND	500	50.0	
Ethylbenzene	ND	500	50.0	
2-Hexanone	ND	5000	50.0	
Isopropylbenzene	ND	500	50.0	
p-Isopropyltoluene	ND	500	50.0	
Methylene Chloride	ND	5000	50.0	
4-Methyl-2-Pentanone	ND	5000	50.0	
Naphthalene	ND	5000	50.0	
n-Propylbenzene	ND	500	50.0	
Styrene	ND	500	50.0	
1,1,1,2-Tetrachloroethane	ND	500	50.0	
1,1,2,2-Tetrachloroethane	ND	500	50.0	
Tetrachloroethene	ND	500	50.0	
Toluene	ND	500	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	500	50.0	
1,1,1-Trichloroethane	ND	500	50.0	
1,1,2-Trichloroethane	ND	500	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	50.0	
Trichloroethene	ND	500	50.0	
1,2,3-Trichloropropane	ND	500	50.0	
1,2,4-Trimethylbenzene	ND	500	50.0	
Trichlorofluoromethane	ND	5000	50.0	
1,3,5-Trimethylbenzene	ND	500	50.0	
Vinyl Acetate	ND	5000	50.0	
Vinyl Chloride	ND	500	50.0	
p/m-Xylene	ND	500	50.0	
o-Xylene	ND	500	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	60-132	
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1256-2	**Sample**	**Solid**	**GC 48**	**04/17/14**	**04/17/14 23:39**	**140417S15**
14-04-1256-2	**Matrix Spike**	**Solid**	**GC 48**	**04/17/14**	**04/17/14 22:52**	**140417S15**
14-04-1256-2	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**04/17/14**	**04/17/14 23:08**	**140417S15**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	356.8	89	392.2	98	64-130	9	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-0981-4	**Sample**	**Solid**	**ICP 7300**	**04/16/14**	**04/17/14 11:49**	**140416S03**
14-04-0981-4	**Matrix Spike**	**Solid**	**ICP 7300**	**04/16/14**	**04/17/14 11:50**	**140416S03**
14-04-0981-4	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/16/14**	**04/17/14 11:51**	**140416S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.616	26	6.339	25	50-115	4	0-20	3
Arsenic	1.043	25.00	25.85	99	26.76	103	75-125	3	0-20	
Barium	66.04	25.00	96.65	122	93.24	109	75-125	4	0-20	
Beryllium	0.2501	25.00	26.49	105	25.99	103	75-125	2	0-20	
Cadmium	ND	25.00	25.90	104	25.40	102	75-125	2	0-20	
Chromium	9.128	25.00	35.70	106	34.91	103	75-125	2	0-20	
Cobalt	4.825	25.00	31.91	108	32.11	109	75-125	1	0-20	
Copper	5.817	25.00	32.30	106	32.00	105	75-125	1	0-20	
Lead	1.779	25.00	27.32	102	27.57	103	75-125	1	0-20	
Molybdenum	ND	25.00	24.22	97	24.34	97	75-125	0	0-20	
Nickel	5.829	25.00	32.33	106	32.35	106	75-125	0	0-20	
Selenium	ND	25.00	22.70	91	22.56	90	75-125	1	0-20	
Silver	ND	12.50	12.71	102	12.51	100	75-125	2	0-20	
Thallium	ND	25.00	23.74	95	23.92	96	75-125	1	0-20	
Vanadium	15.53	25.00	42.28	107	41.17	103	75-125	3	0-20	
Zinc	15.59	25.00	40.75	101	41.47	104	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1270-4	**Sample**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 14:00**	**140417S02**
14-04-1270-4	**Matrix Spike**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 14:02**	**140417S02**
14-04-1270-4	**Matrix Spike Duplicate**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 14:04**	**140417S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7644	92	0.7708	92	71-137	1	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
461-I-O-SS-004	**Sample**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 20:40**	**140416S20**
461-I-O-SS-004	**Matrix Spike**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 19:10**	**140416S20**
461-I-O-SS-004	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 19:28**	**140416S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	97.73	98	104.4	104	50-135	7	0-25	
Aroclor-1260	ND	100.0	101.7	102	102.8	103	50-135	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
715-IV-P/S-O-002	**Sample**	**Other**	**GC/MS Q**	**04/16/14**	**04/17/14 04:04**	**140416S033**
715-IV-P/S-O-002	**Matrix Spike**	**Other**	**GC/MS Q**	**04/16/14**	**04/17/14 04:57**	**140416S033**
715-IV-P/S-O-002	**Matrix Spike Duplicate**	**Other**	**GC/MS Q**	**04/16/14**	**04/17/14 05:24**	**140416S033**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	5000	5537	111	5375	108	61-127	3	0-20	
Carbon Tetrachloride	ND	5000	5195	104	4988	100	51-135	4	0-29	
Chlorobenzene	ND	5000	5715	114	5661	113	57-123	1	0-20	
1,2-Dibromoethane	ND	5000	5602	112	5421	108	64-124	3	0-20	
1,2-Dichlorobenzene	ND	5000	5882	118	5765	115	35-131	2	0-25	
1,2-Dichloroethane	ND	5000	5214	104	5052	101	80-120	3	0-20	
1,1-Dichloroethene	ND	5000	5792	116	5503	110	47-143	5	0-25	
Ethylbenzene	ND	5000	5744	115	5540	111	57-129	4	0-22	
Toluene	ND	5000	5541	111	5439	109	63-123	2	0-20	
Trichloroethene	ND	5000	6512	130	6721	134	44-158	3	0-20	
Vinyl Chloride	ND	5000	5946	119	5861	117	49-139	1	0-47	
p/m-Xylene	ND	10000	11630	116	11380	114	70-130	2	0-30	
o-Xylene	ND	5000	5894	118	5726	115	70-130	3	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	5000	5788	116	5660	113	57-123	2	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-862	**LCS**	**Solid**	**GC 48**	**04/17/14**	**04/17/14 22:36**	**140417B15A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	346.8	87	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18280	**LCS**	**Solid**	**ICP 7300**	**04/16/14**	**04/17/14 11:48**	**140416L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.02	104	80-120	73-127	
Arsenic	25.00	25.44	102	80-120	73-127	
Barium	25.00	26.07	104	80-120	73-127	
Beryllium	25.00	25.05	100	80-120	73-127	
Cadmium	25.00	25.73	103	80-120	73-127	
Chromium	25.00	25.89	104	80-120	73-127	
Cobalt	25.00	27.98	112	80-120	73-127	
Copper	25.00	25.41	102	80-120	73-127	
Lead	25.00	25.72	103	80-120	73-127	
Molybdenum	25.00	25.66	103	80-120	73-127	
Nickel	25.00	27.03	108	80-120	73-127	
Selenium	25.00	23.17	93	80-120	73-127	
Silver	12.50	12.71	102	80-120	73-127	
Thallium	25.00	27.36	109	80-120	73-127	
Vanadium	25.00	25.09	100	80-120	73-127	
Zinc	25.00	25.27	101	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-171	**LCS**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 13:33**	**140417L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8424	101	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-234	**LCS**	**Solid**	**GC 58**	**04/16/14**	**04/17/14 18:34**	**140416L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	93.82	94	50-135	
Aroclor-1260	100.0	91.89	92	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/16/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1245
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8392	**LCS**	**Solid**	**GC/MS Q**	**04/16/14**	**04/17/14 02:17**	**140416L045**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	53.43	107	78-120	71-127	
Carbon Tetrachloride	50.00	54.24	108	49-139	34-154	
Chlorobenzene	50.00	55.02	110	79-120	72-127	
1,2-Dibromoethane	50.00	56.28	113	80-120	73-127	
1,2-Dichlorobenzene	50.00	54.78	110	75-120	68-128	
1,2-Dichloroethane	50.00	54.71	109	80-120	73-127	
1,1-Dichloroethene	50.00	55.98	112	74-122	66-130	
Ethylbenzene	50.00	54.59	109	76-120	69-127	
Toluene	50.00	54.21	108	77-120	70-127	
Trichloroethene	50.00	54.95	110	80-120	73-127	
Vinyl Chloride	50.00	53.30	107	68-122	59-131	
p/m-Xylene	100.0	111.0	111	75-125	67-133	
o-Xylene	50.00	55.94	112	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	57.20	114	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-1245

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 04	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	783	GC 58	1
EPA 8260B	EPA 5030C	823	GC/MS Q	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-1245

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Maricris Dela Rosa

From: Costamagna, Daniel G [daniel.costamagna@amec.com]
Sent: Wednesday, April 23, 2014 12:51 PM
To: Stephen Nowak
Cc: Holland, Kim; Huang, Stephen; Conlan, Linda; Phyu, Thandar; Lee, Zhur
Subject: RE: Work Order Number: 14-02-1245 needs revision

The subject line has been corrected.

From: Costamagna, Daniel G
Sent: Wednesday, April 23, 2014 12:49 PM
To: 'Stephen Nowak'
Cc: Holland, Kim; Huang, Stephen; Conlan, Linda; Phyu, Thandar; Lee, Zhur
Subject: Work Order Number: 14-02-1161 needs revision

Steve,

For the laboratory report 14-04-1245, would you please change sample number 461-I-O-SS-001 (Lab Number: 14-04-1245-1) to 461-I-O-SS-003, sample number 461-I-O-SS-002 (Lab Number: 14-04-1245-2) to 461-I-O-SS-004, sample number 461-I-O-SS-003(Lab Number: 14-04-1245-3) to 461-I-O-SS-005, and sample number 461-I-O-SS-004 (Lab Number: 14-04-1245-4) to 461-I-O-SS-006 and resubmit the report accordingly? I have verified these sample warranting change and corrected the sample control log as well.

Thanks,

Daniel G. Costamagna, PG
Professional Geologist
Technical Professional 3 - Geology
AMEC
Environment & Infrastructure Americas | West Group
121 Innovation Drive, Suite 200, Irvine, California 92617, USA
Tel 949.642.0245 | Fax 949.642.4474
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daniel.costamagna@amec.com
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Be more sustainable - think before you print this message

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CHAIN-OF-CUSTODY RECORD

NB 31312

PROJECT NAME: Pechiney

DATE: 4-16-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-04-1245

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	EPA 8260	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-16-14	1026	461-I-0-SS-001	X				4oz glass jar	S			X		1	
2		1031	461-I-0-SS-002	X					S			X		1	
3		1033	461-I-0-SS-003	X					S			X		1	
4		1036	461-I-0-SS-004	X					S			X		1	
5		1328	715-IV-P/S-CS-003	X					O			X		1	
6		1330	715-IV-P/S-0-002	X	X	X	X		O			X		1	
7		1337	748-IV-P/S-0-001	X	X	X	X		O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/16/14	1400	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	4/16/14	1400
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	4/16/14	1500	SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: CEL	4/16/14	1500
SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: CEL	4/16/14	1756	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CEL	4/16/14	1758

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04- 1 2 ~~3~~ 4 5

bsg 4/16/14

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/16/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 920

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 920

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 278

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 278

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-1340

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/22/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 106270030
Work Order Number: 14-04-1340

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-1340 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/17/14. They were assigned to Work Order 14-04-1340.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1340
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		PO Number:	
		Date/Time Received:	04/17/14 17:41
		Number of Containers:	19
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
748-IV-P/S-CS-001	14-04-1340-1	04/17/14 09:20	1	Other
748-IV-P/S-CS-002	14-04-1340-2	04/17/14 09:25	1	Other
748-IV-P/S-CS-003	14-04-1340-3	04/17/14 09:30	1	Other
755-IV-F/F-SS-001	14-04-1340-4	04/17/14 09:40	1	Solid
748-IV-P/S-SS-001	14-04-1340-5	04/17/14 09:36	1	Solid
757-IV-P/S-SS-001	14-04-1340-6	04/17/14 09:49	1	Solid
757-IV-P/S-SS-002	14-04-1340-7	04/17/14 09:50	1	Solid
757-IV-P/S-SS-003	14-04-1340-8	04/17/14 09:51	1	Solid
748-IV-P/S-SS-002	14-04-1340-9	04/17/14 09:35	1	Solid
739-IV-CS-CS-001	14-04-1340-10	04/17/14 10:02	1	Other
754-IV-P/S-CS-001	14-04-1340-11	04/17/14 10:05	1	Other
754-IV-P/S-O-001	14-04-1340-12	04/17/14 10:10	1	Other
757-IV-P/S-O-001	14-04-1340-13	04/17/14 10:20	1	Other
757-IV-P/S-CS-001	14-04-1340-14	04/17/14 10:24	1	Other
757-IV-P/S-CS-002	14-04-1340-15	04/17/14 10:40	1	Other
739-IV-CS-SS-001	14-04-1340-16	04/17/14 10:50	1	Solid
742-IV-P/S-SS-001	14-04-1340-17	04/17/14 11:05	1	Solid
DC-423	14-04-1340-18	04/17/14 13:11	1	Other
DC-424	14-04-1340-19	04/17/14 13:15	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1340
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	04/17/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
748-IV-P/S-CS-001 (14-04-1340-1)						
Aroclor-1248	400		50	ug/kg	EPA 8082	EPA 3540C
755-IV-F/F-SS-001 (14-04-1340-4)						
Aroclor-1248	85		51	ug/kg	EPA 8082	EPA 3540C
757-IV-P/S-SS-001 (14-04-1340-6)						
Aroclor-1248	68		50	ug/kg	EPA 8082	EPA 3540C
757-IV-P/S-SS-002 (14-04-1340-7)						
Aroclor-1248	65		50	ug/kg	EPA 8082	EPA 3540C
757-IV-P/S-SS-003 (14-04-1340-8)						
Aroclor-1248	61		50	ug/kg	EPA 8082	EPA 3540C
754-IV-P/S-O-001 (14-04-1340-12)						
Arsenic	1.70		0.781	mg/kg	EPA 6010B	EPA 3050B
Barium	95.9		0.521	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.382		0.260	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.0		0.260	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.44		0.260	mg/kg	EPA 6010B	EPA 3050B
Copper	22.4		0.521	mg/kg	EPA 6010B	EPA 3050B
Lead	22.1		0.521	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.46		0.260	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.4		0.260	mg/kg	EPA 6010B	EPA 3050B
Zinc	68.3		1.04	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	630		50	ug/kg	EPA 8082	EPA 3540C
757-IV-P/S-O-001 (14-04-1340-13)						
Barium	25.2		0.493	mg/kg	EPA 6010B	EPA 3050B
Chromium	4.48		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	3.01		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	10.5		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	112		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	3.71		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	11.4		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	36.7		0.985	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1268	180		50	ug/kg	EPA 8082	EPA 3540C
739-IV-CS-SS-001 (14-04-1340-16)						
Aroclor-1248	71		50	ug/kg	EPA 8082	EPA 3540C
DC-423 (14-04-1340-18)						
Aroclor-1268	170		50	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1340
		Project Name:	Former Pechiney Cast Plate Facility / 106270030
		Received:	04/17/14
Attn:	Linda Conlan		Page 2 of 2

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
DC-424 (14-04-1340-19)						
Aroclor-1248	150		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1900		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	790		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
754-IV-P/S-O-001	**14-04-1340-12-A**	**04/17/14 10:10**	**Other**	**ICP 7300**	**04/18/14**	**04/21/14 12:01**	**140418L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	1.70	0.781	1.04	
Barium	95.9	0.521	1.04	
Beryllium	0.382	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	15.0	0.260	1.04	
Cobalt	8.44	0.260	1.04	
Copper	22.4	0.521	1.04	
Lead	22.1	0.521	1.04	
Molybdenum	ND	0.260	1.04	
Nickel	9.46	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	31.4	0.260	1.04	
Zinc	68.3	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
757-IV-P/S-O-001	**14-04-1340-13-A**	**04/17/14 10:20**	**Other**	**ICP 7300**	**04/18/14**	**04/19/14 19:15**	**140418L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	ND	0.739	0.985	
Barium	25.2	0.493	0.985	
Beryllium	ND	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	4.48	0.246	0.985	
Cobalt	3.01	0.246	0.985	
Copper	10.5	0.493	0.985	
Lead	112	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	3.71	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	11.4	0.246	0.985	
Zinc	36.7	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18293**	**N/A**	**Solid**	**ICP 7300**	**04/18/14**	**04/21/14 11:25**	**140418L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
754-IV-P/S-O-001	**14-04-1340-12-`A**	**04/17/14 10:10**	**Other**	**Mercury 05**	**04/17/14**	**04/18/14 17:39**	**140417L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
757-IV-P/S-O-001	**14-04-1340-13-A**	**04/17/14 10:20**	**Other**	**Mercury 05**	**04/17/14**	**04/18/14 17:42**	**140417L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-171**	**N/A**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 13:31**	**140417L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
748-IV-P/S-CS-001	**14-04-1340-1-A**	**04/17/14 09:20**	**Other**	**GC 31**	**04/17/14**	**04/19/14 14:23**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	400	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	71	60-125	
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

748-IV-P/S-CS-002	**14-04-1340-2-A**	**04/17/14 09:25**	**Other**	**GC 31**	**04/17/14**	**04/19/14 10:34**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
748-IV-P/S-CS-003	**14-04-1340-3-A**	**04/17/14 09:30**	**Other**	**GC 31**	**04/17/14**	**04/19/14 10:53**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

755-IV-F/F-SS-001	**14-04-1340-4-A**	**04/17/14 09:40**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 15:20**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	85	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
748-IV-P/S-SS-001	**14-04-1340-5-A**	**04/17/14 09:36**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 12:28**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

757-IV-P/S-SS-001	**14-04-1340-6-A**	**04/17/14 09:49**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 16:17**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	68	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
757-IV-P/S-SS-002	**14-04-1340-7-A**	**04/17/14 09:50**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 16:36**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	65	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

757-IV-P/S-SS-003	**14-04-1340-8-A**	**04/17/14 09:51**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 16:55**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	61	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
748-IV-P/S-SS-002	**14-04-1340-9-A**	**04/17/14 09:35**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 12:47**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

739-IV-CS-CS-001	**14-04-1340-10-A**	**04/17/14 10:02**	**Other**	**GC 31**	**04/17/14**	**04/19/14 11:12**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
754-IV-P/S-CS-001	**14-04-1340-11-A**	**04/17/14 10:05**	**Other**	**GC 31**	**04/17/14**	**04/19/14 11:31**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

754-IV-P/S-O-001	**14-04-1340-12-A**	**04/17/14 10:10**	**Other**	**GC 31**	**04/17/14**	**04/19/14 14:42**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	630	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 7 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
757-IV-P/S-O-001	**14-04-1340-13-A**	**04/17/14 10:20**	**Other**	**GC 31**	**04/17/14**	**04/19/14 17:14**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	180	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	133	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

757-IV-P/S-CS-001	**14-04-1340-14-A**	**04/17/14 10:24**	**Other**	**GC 31**	**04/17/14**	**04/19/14 11:50**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
757-IV-P/S-CS-002	**14-04-1340-15-A**	**04/17/14 10:40**	**Other**	**GC 31**	**04/17/14**	**04/19/14 12:09**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

739-IV-CS-SS-001	**14-04-1340-16-A**	**04/17/14 10:50**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 17:33**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	71	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
742-IV-P/S-SS-001	**14-04-1340-17-A**	**04/17/14 11:05**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 15:01**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

DC-423	**14-04-1340-18-A**	**04/17/14 13:11**	**Other**	**GC 31**	**04/17/14**	**04/19/14 13:06**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	170	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-424	**14-04-1340-19-A**	**04/17/14 13:15**	**Other**	**GC 31**	**04/17/14**	**04/19/14 17:52**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	150	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	790	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	344	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

DC-424	**14-04-1340-19-A**	**04/17/14 13:15**	**Other**	**GC 31**	**04/17/14**	**04/19/14 13:25**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1260	1900	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	337	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 106270030			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-235**	**N/A**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 09:55**	**140417L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1391-1	**Sample**	**Solid**	**ICP 7300**	**04/18/14**	**04/21/14 11:29**	**140418S03**
14-04-1391-1	**Matrix Spike**	**Solid**	**ICP 7300**	**04/18/14**	**04/21/14 11:31**	**140418S03**
14-04-1391-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/18/14**	**04/21/14 11:32**	**140418S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	7.854	31	9.350	37	50-115	17	0-20	3
Arsenic	2.643	25.00	27.54	100	27.80	101	75-125	1	0-20	
Barium	102.5	25.00	128.7	4X	131.4	4X	75-125	4X	0-20	Q
Beryllium	ND	25.00	27.72	111	26.83	107	75-125	3	0-20	
Cadmium	ND	25.00	26.70	107	25.75	103	75-125	4	0-20	
Chromium	8.276	25.00	34.90	107	34.30	104	75-125	2	0-20	
Cobalt	7.031	25.00	35.29	113	34.13	108	75-125	3	0-20	
Copper	5.159	25.00	33.94	115	32.57	110	75-125	4	0-20	
Lead	2.124	25.00	28.77	107	27.96	103	75-125	3	0-20	
Molybdenum	ND	25.00	25.58	102	25.07	100	75-125	2	0-20	
Nickel	11.23	25.00	38.08	107	37.38	105	75-125	2	0-20	
Selenium	ND	25.00	24.60	98	23.14	93	75-125	6	0-20	
Silver	ND	12.50	13.02	104	12.72	102	75-125	2	0-20	
Thallium	ND	25.00	22.34	89	21.31	85	75-125	5	0-20	
Vanadium	36.27	25.00	63.98	111	62.87	106	75-125	2	0-20	
Zinc	52.94	25.00	82.40	118	82.08	117	75-125	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1270-4	**Sample**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 14:00**	**140417S02**
14-04-1270-4	**Matrix Spike**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 14:02**	**140417S02**
14-04-1270-4	**Matrix Spike Duplicate**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 14:04**	**140417S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7644	92	0.7708	92	71-137	1	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
748-IV-P/S-SS-001	**Sample**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 12:28**	**140417S13**
748-IV-P/S-SS-001	**Matrix Spike**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 13:44**	**140417S13**
748-IV-P/S-SS-001	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 14:03**	**140417S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	103.0	103	111.2	111	50-135	8	0-25	
Aroclor-1260	ND	100.0	113.7	114	131.2	131	50-135	14	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-04-1391-1	**Sample**	**Solid**	**ICP 7300**	**04/18/14 00:00**	**04/21/14 11:29**	**140418S03**
14-04-1391-1	**PDS**	**Solid**	**ICP 7300**	**04/18/14 00:00**	**04/21/14 11:33**	**140418S03**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Antimony	ND	25.00	23.98	96	75-125	
Arsenic	2.643	25.00	26.70	96	75-125	
Barium	102.5	25.00	126.6	4X	75-125	Q
Beryllium	ND	25.00	26.40	106	75-125	
Cadmium	ND	25.00	25.33	101	75-125	
Chromium	8.276	25.00	33.29	100	75-125	
Cobalt	7.031	25.00	33.31	105	75-125	
Copper	5.159	25.00	32.25	108	75-125	
Lead	2.124	25.00	27.34	101	75-125	
Molybdenum	ND	25.00	25.02	100	75-125	
Nickel	11.23	25.00	35.95	99	75-125	
Selenium	ND	25.00	23.06	92	75-125	
Silver	ND	12.50	12.39	99	75-125	
Thallium	ND	25.00	20.87	83	75-125	
Vanadium	36.27	25.00	60.76	98	75-125	
Zinc	52.94	25.00	78.19	101	75-125	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18293	**LCS**	**Solid**	**ICP 7300**	**04/18/14**	**04/21/14 11:26**	**140418L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.64	103	80-120	73-127	
Arsenic	25.00	25.24	101	80-120	73-127	
Barium	25.00	25.74	103	80-120	73-127	
Beryllium	25.00	25.25	101	80-120	73-127	
Cadmium	25.00	26.23	105	80-120	73-127	
Chromium	25.00	25.85	103	80-120	73-127	
Cobalt	25.00	28.47	114	80-120	73-127	
Copper	25.00	26.71	107	80-120	73-127	
Lead	25.00	26.97	108	80-120	73-127	
Molybdenum	25.00	26.01	104	80-120	73-127	
Nickel	25.00	27.14	109	80-120	73-127	
Selenium	25.00	23.52	94	80-120	73-127	
Silver	12.50	12.69	102	80-120	73-127	
Thallium	25.00	27.07	108	80-120	73-127	
Vanadium	25.00	25.06	100	80-120	73-127	
Zinc	25.00	26.02	104	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-171	**LCS**	**Solid**	**Mercury 04**	**04/17/14**	**04/17/14 13:33**	**140417L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8424	101	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/17/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1340
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-235	**LCS**	**Solid**	**GC 31**	**04/17/14**	**04/19/14 10:14**	**140417L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	90.16	90	50-135	
Aroclor-1260	100.0	91.04	91	60-130	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-1340

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-1340

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31313

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 4/17/14

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PROJECT NUMBER: 106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

14-04-1340

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Young

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-17-14	0920	748-IV-P/S-CS-001	X		4oz glass jar	O			X		1	
2		0925	748-IV-P/S-CS-002	X			O			X		1	
3		0930	748-IV-P/S-CS-003	X			O			X		1	
4		0940	755-IV-P/S-SS-001	X			S			X		1	
5		0936	748-IV-P/S-SS-001	X			S			X		1	
6		0949	757-IV-P/S-SS-001	X			S			X		1	
7		0950	757-IV-P/S-SS-002	X			S			X		1	
8		0951	757-IV-P/S-SS-003	X			S			X		1	
9		0935	748-IV-P/S-SS-002	X			S			X		1	
10		1002	739-IV-CS-CS-001	X			O			X		1	
11		1005	754-IV-P/S-CS-001	X			O			X		1	
12		1010	754-IV-P/S-O-001	X	X		O			X		1	
13		1020	757-IV-P/S-O-001	X	X		O			X		1	
14		1024	757-IV-P/S-CS-001	X			O			X		1	
15		1040	757-IV-P/S-CS-002	X			O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/17/14	1400	SIGNATURE: PRINTED NAME: Stephen Young COMPANY: AMEC	4/17/14	1400
SIGNATURE: PRINTED NAME: STEPHEN Young COMPANY: AMEC	4/17/14	1440	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEL	4/17/14	1440
SIGNATURE: Alex Marquez PRINTED NAME: ALEX MARQUEZ COMPANY: CEL	4/17/14	1741	SIGNATURE: PRINTED NAME: J. BATES COMPANY:	4/17/14	1741

TOTAL NUMBER OF CONTAINERS: 15/19

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 31276

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 4/17/14 — PAGE 2 OF 2
PROJECT NUMBER: 106270030	LABORATORY NAME: CALSCIENCE	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		1340
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED — YES / NO (NO circled)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES: EPA - 8082

	DATE	TIME	SAMPLE NUMBER	EPA - 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	4/17/14	1050	739-IV-SS-SS-001	X	4oz Glass Jar	S			X		1	
17	↓	1105	742-IV-P/S-SS-001	X	↓	S			X		1	
18	4/17/14	1311	DC-423	X	↓	O			X		1	
19	↓	1315	DC-424	X	↓	O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/17/14	1400	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/17/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/17/14	1440	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CBL	4/17/14	1440
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CBL	4/17/14	1741	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CBL	4/17/14	1741

TOTAL NUMBER OF CONTAINERS: 4/19

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-1340

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/17/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 920

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 920

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-1527

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/24/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-1527

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-1527 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/21/14. They were assigned to Work Order 14-04-1527.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1527
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/21/14 17:00
		Number of Containers:	17
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
461-I-O-SS-007	14-04-1527-1	04/21/14 10:49	1	Solid
461-I-O-SS-008	14-04-1527-2	04/21/14 10:58	1	Solid
461-I-O-SS-009	14-04-1527-3	04/21/14 11:10	1	Solid
696-IV-P/S-SS-008	14-04-1527-4	04/21/14 11:30	1	Solid
696-IV-P/S-SS-009	14-04-1527-5	04/21/14 11:32	1	Solid
765-IIB-CS-CS-001	14-04-1527-6	04/21/14 13:29	1	Other
765-IIB-CS-CS-002	14-04-1527-7	04/21/14 13:35	1	Other
768-IIB-CS-CS-002	14-04-1527-8	04/21/14 13:42	1	Other
768-IIB-CS-CS-001	14-04-1527-9	04/21/14 13:49	1	Other
760-IIB-CS-CS-001	14-04-1527-10	04/21/14 13:58	1	Other
760-IIB-CS-CS-002	14-04-1527-11	04/21/14 14:03	1	Other
776-IV-CS-CS-001	14-04-1527-12	04/21/14 14:09	1	Other
776-IV-CS-CS-002	14-04-1527-13	04/21/14 14:15	1	Other
777-IV-P/S-CS-001	14-04-1527-14	04/21/14 14:23	1	Other
777-IV-P/S-O-001	14-04-1527-15	04/21/14 14:26	1	Other
#984	14-04-1527-16	04/21/14 14:41	1	Solid
#985	14-04-1527-17	04/21/14 14:42	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1527
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/21/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
461-I-O-SS-007 (14-04-1527-1)						
Aroclor-1248	97		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	130		50	ug/kg	EPA 8082	EPA 3540C
461-I-O-SS-009 (14-04-1527-3)						
Aroclor-1248	950		51	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	66		51	ug/kg	EPA 8082	EPA 3540C
696-IV-P/S-SS-008 (14-04-1527-4)						
C8	270		49	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	5200		49	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	1000		49	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	6500		49	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	58		50	ug/kg	EPA 8082	EPA 3540C
n-Butylbenzene	6900		2500	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	4000		2500	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	9700		2500	ug/kg	EPA 8260B	EPA 5030C
696-IV-P/S-SS-009 (14-04-1527-5)						
C8	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	720		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	140		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	8.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	920		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	130		50	ug/kg	EPA 8082	EPA 3540C
765-IIB-CS-CS-002 (14-04-1527-7)						
Aroclor-1248	100		50	ug/kg	EPA 8082	EPA 3540C
760-IIB-CS-CS-001 (14-04-1527-10)						
Aroclor-1248	53		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	150		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	180		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	73		50	ug/kg	EPA 8082	EPA 3540C
777-IV-P/S-CS-001 (14-04-1527-14)						
Aroclor-1248	190		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	190		50	ug/kg	EPA 8082	EPA 3540C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1527
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/21/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
777-IV-P/S-O-001 (14-04-1527-15)						
Arsenic	1.41		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	52.7		0.503	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.665		0.503	mg/kg	EPA 6010B	EPA 3050B
Chromium	6.63		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	1.71		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	37.2		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	48.7		0.503	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.296		0.251	mg/kg	EPA 6010B	EPA 3050B
Nickel	3.87		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	8.44		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	38.3		1.01	mg/kg	EPA 6010B	EPA 3050B
C9-C10	2300		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	1200		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	1800		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	2300		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	3600		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	5100		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	4100		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	2900		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	25000		1000	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1268	8100		500	ug/kg	EPA 8082	EPA 3540C
n-Butylbenzene	1800		1000	ug/kg	EPA 8260B	EPA 5030C
sec-Butylbenzene	1100		1000	ug/kg	EPA 8260B	EPA 5030C
p-Isopropyltoluene	2100		1000	ug/kg	EPA 8260B	EPA 5030C
n-Propylbenzene	1100		1000	ug/kg	EPA 8260B	EPA 5030C
1,2,4-Trimethylbenzene	13000		1000	ug/kg	EPA 8260B	EPA 5030C
1,3,5-Trimethylbenzene	2900		1000	ug/kg	EPA 8260B	EPA 5030C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1527
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/21/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#984 (14-04-1527-16)						
Arsenic	3.54		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	122		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.349		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	21.8		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.64		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	69.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	27.9		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	16.8		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.9		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	76.1		0.990	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.102		0.0847	mg/kg	EPA 7471A	EPA 7471A Total
#985 (14-04-1527-17)						
Arsenic	1.19		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	107		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.366		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.6		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.78		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	56.2		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	8.21		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	24.9		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.9		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	46.9		1.01	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-008	**14-04-1527-4-A**	**04/21/14 11:30**	**Solid**	**GC 45**	**04/21/14**	**04/22/14 10:16**	**140421B05**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	49	9.80	
C7	ND	49	9.80	
C8	270	49	9.80	
C9-C10	5200	49	9.80	
C11-C12	1000	49	9.80	
C13-C14	ND	49	9.80	
C15-C16	ND	49	9.80	
C17-C18	ND	49	9.80	
C19-C20	ND	49	9.80	
C21-C22	ND	49	9.80	
C23-C24	ND	49	9.80	
C25-C28	ND	49	9.80	
C29-C32	ND	49	9.80	
C33-C36	ND	49	9.80	
C37-C40	ND	49	9.80	
C41-C44	ND	49	9.80	
C6-C44 Total	6500	49	9.80	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	133	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-009	**14-04-1527-5-A**	**04/21/14 11:32**	**Solid**	**GC 45**	**04/21/14**	**04/22/14 07:43**	**140421B05**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	13	5.0	0.990	
C9-C10	720	5.0	0.990	
C11-C12	140	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	10	5.0	0.990	
C19-C20	8.2	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	920	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	132	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
777-IV-P/S-O-001	**14-04-1527-15-A**	**04/21/14 14:26**	**Other**	**GC 45**	**04/21/14**	**04/22/14 08:01**	**140421B05**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	1000	200	
C7	ND	1000	200	
C8	ND	1000	200	
C9-C10	2300	1000	200	
C11-C12	ND	1000	200	
C13-C14	ND	1000	200	
C15-C16	ND	1000	200	
C17-C18	ND	1000	200	
C19-C20	1200	1000	200	
C21-C22	1800	1000	200	
C23-C24	2300	1000	200	
C25-C28	3600	1000	200	
C29-C32	5100	1000	200	
C33-C36	4100	1000	200	
C37-C40	2900	1000	200	
C41-C44	ND	1000	200	
C6-C44 Total	25000	1000	200	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-865**	**N/A**	**Solid**	**GC 45**	**04/21/14**	**04/21/14 23:54**	**140421B05**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	133	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
777-IV-P/S-O-001	**14-04-1527-15-A**	**04/21/14 14:26**	**Other**	**ICP 7300**	**04/21/14**	**04/22/14 15:35**	**140421L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	1.41	0.754	1.01	
Barium	52.7	0.503	1.01	
Beryllium	ND	0.251	1.01	
Cadmium	0.665	0.503	1.01	
Chromium	6.63	0.251	1.01	
Cobalt	1.71	0.251	1.01	
Copper	37.2	0.503	1.01	
Lead	48.7	0.503	1.01	
Molybdenum	0.296	0.251	1.01	
Nickel	3.87	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	8.44	0.251	1.01	
Zinc	38.3	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#984	**14-04-1527-16-A**	**04/21/14 14:41**	**Solid**	**ICP 7300**	**04/21/14**	**04/22/14 15:40**	**140421L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	3.54	0.743	0.990	
Barium	122	0.495	0.990	
Beryllium	0.349	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	21.8	0.248	0.990	
Cobalt	9.64	0.248	0.990	
Copper	69.0	0.495	0.990	
Lead	27.9	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	16.8	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	32.9	0.248	0.990	
Zinc	76.1	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#985	**14-04-1527-17-A**	**04/21/14 14:42**	**Solid**	**ICP 7300**	**04/21/14**	**04/22/14 15:41**	**140421L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	1.19	0.758	1.01	
Barium	107	0.505	1.01	
Beryllium	0.366	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	18.6	0.253	1.01	
Cobalt	9.78	0.253	1.01	
Copper	56.2	0.505	1.01	
Lead	8.21	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	24.9	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	33.9	0.253	1.01	
Zinc	46.9	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18299**	**N/A**	**Solid**	**ICP 7300**	**04/21/14**	**04/21/14 19:37**	**140421L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
777-IV-P/S-O-001	**14-04-1527-15-A**	**04/21/14 14:26**	**Other**	**Mercury 04**	**04/22/14**	**04/22/14 16:46**	**140422L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

#984	**14-04-1527-16-A**	**04/21/14 14:41**	**Solid**	**Mercury 04**	**04/22/14**	**04/22/14 16:49**	**140422L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.102	0.0847	1.00	

#985	**14-04-1527-17-A**	**04/21/14 14:42**	**Solid**	**Mercury 04**	**04/22/14**	**04/22/14 16:51**	**140422L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Method Blank	**099-16-272-181**	**N/A**	**Solid**	**Mercury 04**	**04/22/14**	**04/22/14 16:53**	**140422L05**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
461-I-O-SS-007	**14-04-1527-1-A**	**04/21/14 10:49**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 00:49**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	97	50	1.00	
Aroclor-1254	130	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

461-I-O-SS-008	**14-04-1527-2-A**	**04/21/14 10:58**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 01:07**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
461-I-O-SS-009	**14-04-1527-3-A**	**04/21/14 11:10**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 01:25**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	950	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	66	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

696-IV-P/S-SS-008	**14-04-1527-4-A**	**04/21/14 11:30**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 15:51**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	58	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	123	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-009	**14-04-1527-5-A**	**04/21/14 11:32**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 05:37**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	130	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

765-IIB-CS-CS-001	**14-04-1527-6-A**	**04/21/14 13:29**	**Other**	**GC 58**	**04/21/14**	**04/23/14 01:43**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
765-IIB-CS-CS-002	**14-04-1527-7-A**	**04/21/14 13:35**	**Other**	**GC 58**	**04/21/14**	**04/23/14 02:01**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	100	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

768-IIB-CS-CS-002	**14-04-1527-8-A**	**04/21/14 13:42**	**Other**	**GC 58**	**04/21/14**	**04/23/14 02:19**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
768-IIB-CS-CS-001	**14-04-1527-9-A**	**04/21/14 13:49**	**Other**	**GC 58**	**04/21/14**	**04/23/14 05:55**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	532	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

760-IIB-CS-CS-001	**14-04-1527-10-A**	**04/21/14 13:58**	**Other**	**GC 58**	**04/21/14**	**04/23/14 02:37**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	53	50	1.00	
Aroclor-1254	150	50	1.00	
Aroclor-1260	180	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	73	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
760-IIB-CS-CS-002	**14-04-1527-11-A**	**04/21/14 14:03**	**Other**	**GC 58**	**04/21/14**	**04/23/14 02:55**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

776-IV-CS-CS-001	**14-04-1527-12-A**	**04/21/14 14:09**	**Other**	**GC 58**	**04/21/14**	**04/23/14 03:13**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
776-IV-CS-CS-002	**14-04-1527-13-A**	**04/21/14 14:15**	**Other**	**GC 58**	**04/21/14**	**04/23/14 03:31**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

777-IV-P/S-CS-001	**14-04-1527-14-A**	**04/21/14 14:23**	**Other**	**GC 58**	**04/21/14**	**04/23/14 14:52**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	190	50	1.00	
Aroclor-1254	190	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	160	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
777-IV-P/S-O-001	**14-04-1527-15-A**	**04/21/14 14:26**	**Other**	**GC 58**	**04/21/14**	**04/23/14 06:31**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	8100	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	281	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

#984	**14-04-1527-16-A**	**04/21/14 14:41**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 03:49**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#985	**14-04-1527-17-A**	**04/21/14 14:42**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 04:07**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

Method Blank	**099-02-003-236**	**N/A**	**Solid**	**GC 58**	**04/21/14**	**04/22/14 23:55**	**140421L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-008	**14-04-1527-4-A**	**04/21/14 11:30**	**Solid**	**GC/MS BB**	**04/21/14**	**04/22/14 16:03**	**140422L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	63000	250	
Benzene	ND	2500	250	
Bromobenzene	ND	2500	250	
Bromochloromethane	ND	2500	250	
Bromodichloromethane	ND	2500	250	
Bromoform	ND	2500	250	
Bromomethane	ND	13000	250	
2-Butanone	ND	25000	250	
n-Butylbenzene	6900	2500	250	
sec-Butylbenzene	ND	2500	250	
tert-Butylbenzene	ND	2500	250	
Carbon Disulfide	ND	25000	250	
Carbon Tetrachloride	ND	2500	250	
Chlorobenzene	ND	2500	250	
Chloroethane	ND	2500	250	
Chloroform	ND	2500	250	
Chloromethane	ND	13000	250	
2-Chlorotoluene	ND	2500	250	
4-Chlorotoluene	ND	2500	250	
Dibromochloromethane	ND	2500	250	
1,2-Dibromo-3-Chloropropane	ND	5000	250	
1,2-Dibromoethane	ND	2500	250	
Dibromomethane	ND	2500	250	
1,2-Dichlorobenzene	ND	2500	250	
1,3-Dichlorobenzene	ND	2500	250	
1,4-Dichlorobenzene	ND	2500	250	
Dichlorodifluoromethane	ND	2500	250	
1,1-Dichloroethane	ND	2500	250	
1,2-Dichloroethane	ND	2500	250	
1,1-Dichloroethene	ND	2500	250	
c-1,2-Dichloroethene	ND	2500	250	
t-1,2-Dichloroethene	ND	2500	250	
1,2-Dichloropropane	ND	2500	250	
1,3-Dichloropropane	ND	2500	250	
2,2-Dichloropropane	ND	2500	250	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/21/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1527
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 0106270030		Page 2 of 8

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2500	250	
c-1,3-Dichloropropene	ND	2500	250	
t-1,3-Dichloropropene	ND	2500	250	
Ethylbenzene	ND	2500	250	
2-Hexanone	ND	25000	250	
Isopropylbenzene	ND	2500	250	
p-Isopropyltoluene	ND	2500	250	
Methylene Chloride	ND	25000	250	
4-Methyl-2-Pentanone	ND	25000	250	
Naphthalene	ND	25000	250	
n-Propylbenzene	ND	2500	250	
Styrene	ND	2500	250	
1,1,1,2-Tetrachloroethane	ND	2500	250	
1,1,2,2-Tetrachloroethane	ND	2500	250	
Tetrachloroethene	ND	2500	250	
Toluene	ND	2500	250	
1,2,3-Trichlorobenzene	ND	5000	250	
1,2,4-Trichlorobenzene	ND	2500	250	
1,1,1-Trichloroethane	ND	2500	250	
1,1,2-Trichloroethane	ND	2500	250	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	25000	250	
Trichloroethene	ND	2500	250	
1,2,3-Trichloropropane	ND	2500	250	
1,2,4-Trimethylbenzene	4000	2500	250	
Trichlorofluoromethane	ND	25000	250	
1,3,5-Trimethylbenzene	9700	2500	250	
Vinyl Acetate	ND	25000	250	
Vinyl Chloride	ND	2500	250	
p/m-Xylene	ND	2500	250	
o-Xylene	ND	2500	250	
Methyl-t-Butyl Ether (MTBE)	ND	2500	250	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	113	60-132	
Dibromofluoromethane	97	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
696-IV-P/S-SS-009	**14-04-1527-5-A**	**04/21/14 11:32**	**Solid**	**GC/MS BB**	**04/21/14**	**04/22/14 17:24**	**140422L020**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	25000	100	
Benzene	ND	990	100	
Bromobenzene	ND	990	100	
Bromochloromethane	ND	990	100	
Bromodichloromethane	ND	990	100	
Bromoform	ND	990	100	
Bromomethane	ND	5000	100	
2-Butanone	ND	9900	100	
n-Butylbenzene	ND	990	100	
sec-Butylbenzene	ND	990	100	
tert-Butylbenzene	ND	990	100	
Carbon Disulfide	ND	9900	100	
Carbon Tetrachloride	ND	990	100	
Chlorobenzene	ND	990	100	
Chloroethane	ND	990	100	
Chloroform	ND	990	100	
Chloromethane	ND	5000	100	
2-Chlorotoluene	ND	990	100	
4-Chlorotoluene	ND	990	100	
Dibromochloromethane	ND	990	100	
1,2-Dibromo-3-Chloropropane	ND	2000	100	
1,2-Dibromoethane	ND	990	100	
Dibromomethane	ND	990	100	
1,2-Dichlorobenzene	ND	990	100	
1,3-Dichlorobenzene	ND	990	100	
1,4-Dichlorobenzene	ND	990	100	
Dichlorodifluoromethane	ND	990	100	
1,1-Dichloroethane	ND	990	100	
1,2-Dichloroethane	ND	990	100	
1,1-Dichloroethene	ND	990	100	
c-1,2-Dichloroethene	ND	990	100	
t-1,2-Dichloroethene	ND	990	100	
1,2-Dichloropropane	ND	990	100	
1,3-Dichloropropane	ND	990	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/21/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1527
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 0106270030		Page 4 of 8

Parameter	Result	RL	DF	Qualifiers
2,2-Dichloropropane	ND	990	100	
1,1-Dichloropropene	ND	990	100	
c-1,3-Dichloropropene	ND	990	100	
t-1,3-Dichloropropene	ND	990	100	
Ethylbenzene	ND	990	100	
2-Hexanone	ND	9900	100	
Isopropylbenzene	ND	990	100	
p-Isopropyltoluene	ND	990	100	
Methylene Chloride	ND	9900	100	
4-Methyl-2-Pentanone	ND	9900	100	
Naphthalene	ND	9900	100	
n-Propylbenzene	ND	990	100	
Styrene	ND	990	100	
1,1,1,2-Tetrachloroethane	ND	990	100	
1,1,2,2-Tetrachloroethane	ND	990	100	
Tetrachloroethene	ND	990	100	
Toluene	ND	990	100	
1,2,3-Trichlorobenzene	ND	2000	100	
1,2,4-Trichlorobenzene	ND	990	100	
1,1,1-Trichloroethane	ND	990	100	
1,1,2-Trichloroethane	ND	990	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9900	100	
Trichloroethene	ND	990	100	
1,2,3-Trichloropropane	ND	990	100	
1,2,4-Trimethylbenzene	ND	990	100	
Trichlorofluoromethane	ND	9900	100	
1,3,5-Trimethylbenzene	ND	990	100	
Vinyl Acetate	ND	9900	100	
Vinyl Chloride	ND	990	100	
p/m-Xylene	ND	990	100	
o-Xylene	ND	990	100	
Methyl-t-Butyl Ether (MTBE)	ND	990	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	104	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	94	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
777-IV-P/S-O-001	**14-04-1527-15-A**	**04/21/14 14:26**	**Other**	**GC/MS BB**	**04/21/14**	**04/22/14 17:51**	**140422L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	25000	100	
Benzene	ND	1000	100	
Bromobenzene	ND	1000	100	
Bromochloromethane	ND	1000	100	
Bromodichloromethane	ND	1000	100	
Bromoform	ND	1000	100	
Bromomethane	ND	5100	100	
2-Butanone	ND	10000	100	
n-Butylbenzene	1800	1000	100	
sec-Butylbenzene	1100	1000	100	
tert-Butylbenzene	ND	1000	100	
Carbon Disulfide	ND	10000	100	
Carbon Tetrachloride	ND	1000	100	
Chlorobenzene	ND	1000	100	
Chloroethane	ND	1000	100	
Chloroform	ND	1000	100	
Chloromethane	ND	5100	100	
2-Chlorotoluene	ND	1000	100	
4-Chlorotoluene	ND	1000	100	
Dibromochloromethane	ND	1000	100	
1,2-Dibromo-3-Chloropropane	ND	2000	100	
1,2-Dibromoethane	ND	1000	100	
Dibromomethane	ND	1000	100	
1,2-Dichlorobenzene	ND	1000	100	
1,3-Dichlorobenzene	ND	1000	100	
1,4-Dichlorobenzene	ND	1000	100	
Dichlorodifluoromethane	ND	1000	100	
1,1-Dichloroethane	ND	1000	100	
1,2-Dichloroethane	ND	1000	100	
1,1-Dichloroethene	ND	1000	100	
c-1,2-Dichloroethene	ND	1000	100	
t-1,2-Dichloroethene	ND	1000	100	
1,2-Dichloropropane	ND	1000	100	
1,3-Dichloropropane	ND	1000	100	
2,2-Dichloropropane	ND	1000	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/21/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1527
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 0106270030		Page 6 of 8

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1000	100	
c-1,3-Dichloropropene	ND	1000	100	
t-1,3-Dichloropropene	ND	1000	100	
Ethylbenzene	ND	1000	100	
2-Hexanone	ND	10000	100	
Isopropylbenzene	ND	1000	100	
p-Isopropyltoluene	2100	1000	100	
Methylene Chloride	ND	10000	100	
4-Methyl-2-Pentanone	ND	10000	100	
Naphthalene	ND	10000	100	
n-Propylbenzene	1100	1000	100	
Styrene	ND	1000	100	
1,1,1,2-Tetrachloroethane	ND	1000	100	
1,1,2,2-Tetrachloroethane	ND	1000	100	
Tetrachloroethene	ND	1000	100	
Toluene	ND	1000	100	
1,2,3-Trichlorobenzene	ND	2000	100	
1,2,4-Trichlorobenzene	ND	1000	100	
1,1,1-Trichloroethane	ND	1000	100	
1,1,2-Trichloroethane	ND	1000	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10000	100	
Trichloroethene	ND	1000	100	
1,2,3-Trichloropropane	ND	1000	100	
1,2,4-Trimethylbenzene	13000	1000	100	
Trichlorofluoromethane	ND	10000	100	
1,3,5-Trimethylbenzene	2900	1000	100	
Vinyl Acetate	ND	10000	100	
Vinyl Chloride	ND	1000	100	
p/m-Xylene	ND	1000	100	
o-Xylene	ND	1000	100	
Methyl-t-Butyl Ether (MTBE)	ND	1000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	60-132	
Dibromofluoromethane	93	63-141	
1,2-Dichloroethane-d4	90	62-146	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8408**	**N/A**	**Solid**	**GC/MS BB**	**04/22/14**	**04/22/14 12:07**	**140422L020**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	500	50.0	
Bromobenzene	ND	500	50.0	
Bromochloromethane	ND	500	50.0	
Bromodichloromethane	ND	500	50.0	
Bromoform	ND	500	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	5000	50.0	
n-Butylbenzene	ND	500	50.0	
sec-Butylbenzene	ND	500	50.0	
tert-Butylbenzene	ND	500	50.0	
Carbon Disulfide	ND	5000	50.0	
Carbon Tetrachloride	ND	500	50.0	
Chlorobenzene	ND	500	50.0	
Chloroethane	ND	500	50.0	
Chloroform	ND	500	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	500	50.0	
4-Chlorotoluene	ND	500	50.0	
Dibromochloromethane	ND	500	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	500	50.0	
Dibromomethane	ND	500	50.0	
1,2-Dichlorobenzene	ND	500	50.0	
1,3-Dichlorobenzene	ND	500	50.0	
1,4-Dichlorobenzene	ND	500	50.0	
Dichlorodifluoromethane	ND	500	50.0	
1,1-Dichloroethane	ND	500	50.0	
1,2-Dichloroethane	ND	500	50.0	
1,1-Dichloroethene	ND	500	50.0	
c-1,2-Dichloroethene	ND	500	50.0	
t-1,2-Dichloroethene	ND	500	50.0	
1,2-Dichloropropane	ND	500	50.0	
1,3-Dichloropropane	ND	500	50.0	
2,2-Dichloropropane	ND	500	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	04/21/14
121 Innovation Drive, Suite 200	Work Order:	14-04-1527
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 0106270030		Page 8 of 8

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	50.0	
c-1,3-Dichloropropene	ND	500	50.0	
t-1,3-Dichloropropene	ND	500	50.0	
Ethylbenzene	ND	500	50.0	
2-Hexanone	ND	5000	50.0	
Isopropylbenzene	ND	500	50.0	
p-Isopropyltoluene	ND	500	50.0	
Methylene Chloride	ND	5000	50.0	
4-Methyl-2-Pentanone	ND	5000	50.0	
Naphthalene	ND	5000	50.0	
n-Propylbenzene	ND	500	50.0	
Styrene	ND	500	50.0	
1,1,1,2-Tetrachloroethane	ND	500	50.0	
1,1,2,2-Tetrachloroethane	ND	500	50.0	
Tetrachloroethene	ND	500	50.0	
Toluene	ND	500	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	500	50.0	
1,1,1-Trichloroethane	ND	500	50.0	
1,1,2-Trichloroethane	ND	500	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	50.0	
Trichloroethene	ND	500	50.0	
1,2,3-Trichloropropane	ND	500	50.0	
1,2,4-Trimethylbenzene	ND	500	50.0	
Trichlorofluoromethane	ND	5000	50.0	
1,3,5-Trimethylbenzene	ND	500	50.0	
Vinyl Acetate	ND	5000	50.0	
Vinyl Chloride	ND	500	50.0	
p/m-Xylene	ND	500	50.0	
o-Xylene	ND	500	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	93	63-141	
1,2-Dichloroethane-d4	96	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1473-44	**Sample**	**Solid**	**GC 45**	**04/21/14**	**04/22/14 01:08**	**140421S05**
14-04-1473-44	**Matrix Spike**	**Solid**	**GC 45**	**04/21/14**	**04/22/14 00:32**	**140421S05**
14-04-1473-44	**Matrix Spike Duplicate**	**Solid**	**GC 45**	**04/21/14**	**04/22/14 00:50**	**140421S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	462.7	116	444.2	111	64-130	4	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1394-3	**Sample**	**Solid**	**ICP 7300**	**04/21/14**	**04/21/14 19:40**	**140421S03**
14-04-1394-3	**Matrix Spike**	**Solid**	**ICP 7300**	**04/21/14**	**04/21/14 19:41**	**140421S03**
14-04-1394-3	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/21/14**	**04/21/14 19:42**	**140421S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	9.313	37	8.642	35	50-115	7	0-20	3
Arsenic	7.812	25.00	31.93	96	30.45	91	75-125	5	0-20	
Barium	104.3	25.00	130.9	4X	134.0	4X	75-125	4X	0-20	Q
Beryllium	0.3376	25.00	26.27	104	25.69	101	75-125	2	0-20	
Cadmium	ND	25.00	25.76	103	25.35	101	75-125	2	0-20	
Chromium	29.52	25.00	57.45	112	57.92	114	75-125	1	0-20	
Cobalt	8.794	25.00	35.31	106	34.47	103	75-125	2	0-20	
Copper	23.38	25.00	53.86	122	40.73	69	75-125	28	0-20	3,4
Lead	14.64	25.00	37.56	92	33.79	77	75-125	11	0-20	
Molybdenum	ND	25.00	21.36	85	20.57	82	75-125	4	0-20	
Nickel	32.84	25.00	62.55	119	60.47	111	75-125	3	0-20	
Selenium	ND	25.00	22.71	91	22.15	89	75-125	2	0-20	
Silver	ND	12.50	12.99	104	12.89	103	75-125	1	0-20	
Thallium	ND	25.00	24.31	97	24.58	98	75-125	1	0-20	
Vanadium	20.09	25.00	46.12	104	44.97	100	75-125	3	0-20	
Zinc	33.89	25.00	60.43	106	51.07	69	75-125	17	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1478-7	**Sample**	**Solid**	**Mercury 04**	**04/22/14**	**04/22/14 17:13**	**140422S05**
14-04-1478-7	**Matrix Spike**	**Solid**	**Mercury 04**	**04/22/14**	**04/22/14 17:16**	**140422S05**
14-04-1478-7	**Matrix Spike Duplicate**	**Solid**	**Mercury 04**	**04/22/14**	**04/22/14 17:18**	**140422S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7517	90	0.5256	63	71-137	35	0-14	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
461-I-O-SS-008	**Sample**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 01:07**	**140421S11**
461-I-O-SS-008	**Matrix Spike**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 00:13**	**140421S11**
461-I-O-SS-008	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**04/21/14**	**04/23/14 00:31**	**140421S11**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	88.18	88	86.94	87	50-135	1	0-25	
Aroclor-1260	ND	100.0	92.55	93	95.24	95	50-135	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1294-3	**Sample**	**Solid**	**GC/MS BB**	**04/17/14**	**04/22/14 13:20**	**140422S008**
14-04-1294-3	**Matrix Spike**	**Solid**	**GC/MS BB**	**04/17/14**	**04/22/14 13:47**	**140422S008**
14-04-1294-3	**Matrix Spike Duplicate**	**Solid**	**GC/MS BB**	**04/17/14**	**04/22/14 14:15**	**140422S008**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	45.03	90	44.03	88	61-127	2	0-20	
Carbon Tetrachloride	ND	50.00	44.75	89	43.52	87	51-135	3	0-29	
Chlorobenzene	ND	50.00	47.31	95	46.03	92	57-123	3	0-20	
1,2-Dibromoethane	ND	50.00	47.17	94	46.22	92	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	44.69	89	43.63	87	35-131	2	0-25	
1,2-Dichloroethane	ND	50.00	44.27	89	42.82	86	80-120	3	0-20	
1,1-Dichloroethene	ND	50.00	43.68	87	42.30	85	47-143	3	0-25	
Ethylbenzene	ND	50.00	47.91	96	46.64	93	57-129	3	0-22	
Toluene	ND	50.00	46.56	93	45.41	91	63-123	3	0-20	
Trichloroethene	ND	50.00	43.90	88	42.94	86	44-158	2	0-20	
Vinyl Chloride	ND	50.00	40.27	81	39.77	80	49-139	1	0-47	
p/m-Xylene	ND	100.0	97.73	98	95.40	95	70-130	2	0-30	
o-Xylene	ND	50.00	50.73	101	49.35	99	70-130	3	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	47.16	94	45.76	92	57-123	3	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-865	**LCS**	**Solid**	**GC 45**	**04/21/14**	**04/22/14 00:13**	**140421B05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	457.4	114	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18299	**LCS**	**Solid**	**ICP 7300**	**04/21/14**	**04/21/14 19:39**	**140421L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.47	106	80-120	73-127	
Arsenic	25.00	26.28	105	80-120	73-127	
Barium	25.00	27.05	108	80-120	73-127	
Beryllium	25.00	25.79	103	80-120	73-127	
Cadmium	25.00	27.72	111	80-120	73-127	
Chromium	25.00	27.24	109	80-120	73-127	
Cobalt	25.00	29.98	120	80-120	73-127	
Copper	25.00	27.59	110	80-120	73-127	
Lead	25.00	27.62	110	80-120	73-127	
Molybdenum	25.00	26.81	107	80-120	73-127	
Nickel	25.00	28.27	113	80-120	73-127	
Selenium	25.00	24.34	97	80-120	73-127	
Silver	12.50	13.32	107	80-120	73-127	
Thallium	25.00	28.71	115	80-120	73-127	
Vanadium	25.00	26.51	106	80-120	73-127	
Zinc	25.00	27.35	109	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-181	**LCS**	**Solid**	**Mercury 04**	**04/22/14**	**04/22/14 16:55**	**140422L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8583	103	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-236	**LCS**	**Solid**	**GC 58**	**04/21/14**	**04/22/14 23:37**	**140421L11**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	85.82	86	50-135	
Aroclor-1260	100.0	88.54	89	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/21/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1527
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8408	**LCS**	**Solid**	**GC/MS BB**	**04/22/14**	**04/22/14 10:19**	**140422L020**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	47.27	95	78-120	71-127	
Carbon Tetrachloride	50.00	44.97	90	49-139	34-154	
Chlorobenzene	50.00	50.22	100	79-120	72-127	
1,2-Dibromoethane	50.00	51.77	104	80-120	73-127	
1,2-Dichlorobenzene	50.00	48.76	98	75-120	68-128	
1,2-Dichloroethane	50.00	46.07	92	80-120	73-127	
1,1-Dichloroethene	50.00	42.99	86	74-122	66-130	
Ethylbenzene	50.00	48.96	98	76-120	69-127	
Toluene	50.00	48.54	97	77-120	70-127	
Trichloroethene	50.00	49.81	100	80-120	73-127	
Vinyl Chloride	50.00	42.05	84	68-122	59-131	
p/m-Xylene	100.0	99.21	99	75-125	67-133	
o-Xylene	50.00	52.49	105	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	50.18	100	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-1527

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 04	1
EPA 8015B (M)	EPA 3550B	682	GC 45	1
EPA 8082	EPA 3540C	669	GC 58	1
EPA 8260B	EPA 5030C	823	GC/MS BB	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-1527

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Maricris Dela Rosa

From: Stephen Nowak
Sent: Wednesday, April 23, 2014 2:35 PM
To: Maricris Dela Rosa
Subject: FW: Pechiney: Revision to Work Order 14-04-1527
Attachments: RE: Work Order Number: 14-02-1245 needs revision; 14-04-1527_sample_receipt.pdf

---
From: Huang, Stephen[SMTP:STEPHEN.HUANG@AMEC.COM]
Sent: Wednesday, April 23, 2014 2:33:05 PM
To: Stephen Nowak; Maricris Dela Rosa
Cc: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Pechiney: Revision to Work Order 14-04-1527
Auto forwarded by a Rule

Hello Stephen and Maricris,

Based on Daniel's email, please make the following revisions to the sample IDs below for Work Order 14-04-1527, which has yet to be issued:

1.) From: 461-I-O-SS-005 To: 461-I-O-SS-007
2.) From: 461-I-O-SS-006 To: 461-I-O-SS-008
3.) From: 461-I-O-SS-007 To: 461-I-O-SS-009

Backup email from Daniel and sample receipt from the samples collected on April 21, 2014 are appended to this email.

Thanks,
Stephen

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed.
Its contents (including any attachments) may contain confidential and/or privileged information.
If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents.
If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message.

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CHAIN-OF-CUSTODY RECORD

NB 31314

PROJECT NAME: Pechiney			DATE: 4-21-14 PAGE 1 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-04-1527
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8260	EPA 8015	Title 22 Metals											CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-21-14	1049	461-I-0-SS-005	X														4oz glass jar	S			X		1	
2		1058	461-I-0-SS-006	X															S			X		1	
3		1110	461-I-0-SS-007	X															S			X		1	
4		1130	696-IV-P/S-SS-008	X	X	X		Note											S			X		1	
5		1132	696-IV-P/S-SS-009	X	X	X													S			X		1	
6		1329	765-11B-CS-CS-001	X															O			X		1	
7		1335	765-11B-CS-CS-002	X															O			X		1	
8		1342	768-11B-CS-CS-002	X															O			X		1	
9		1349	768-11B-CS-CS-001	X															O			X		1	
10		1358	760-11B-CS-CS-001	X															O			X		1	
11		1403	760-11B-CS-CS-002	X															O			X		1	
12		1409	776-IV-CS-CS-001	X															O			X		1	
13		1415	776-IV-CS-CS-002	X															O			X		1	
14		1423	777-IV-P/S-CS-001	X															O			X		1	
15		1426	777-IV-P/S-0-001	X	X	X	X												O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY:	4/21/14	1505	SIGNATURE: PRINTED NAME: D. Rawson COMPANY: CEL	4/21/14	1505
SIGNATURE: PRINTED NAME: D. Rawson COMPANY: CEL	4/21/14	17:00	SIGNATURE: Dannyle PRINTED NAME: DANNY LE COMPANY: CEL	4/21/14	17:00
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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NB 31315

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney			DATE: 4-21-14 PAGE 2 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS: (1527)
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES: EPA 8082; Title 22 Metals

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	4-21-14	1441	#984	X	X	4 oz glass jar	S			X		1	
17	↓	1442	#985	X	X	↓	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/21/14	1505	SIGNATURE: PRINTED NAME: D. Dawson COMPANY: CEL	4/21/14	15-05
SIGNATURE: PRINTED NAME: D. Dawson COMPANY: CEL	4/21/14	17-00	SIGNATURE: Danny Le PRINTED NAME: DANNY CE COMPANY: CEL	4/21/14	17:00
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 2/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-1527

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/21/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na_2** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na_2** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na_2** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na_2:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-1601

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/28/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

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Work Order Number: 14-04-1601

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-1601 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/22/14. They were assigned to Work Order 14-04-1601.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1601
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/22/14 16:45
		Number of Containers:	15
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
pipe wrap	14-04-1601-1	04/22/14 08:58	1	Other
768-IIB-CS-SS-001	14-04-1601-2	04/22/14 10:48	1	Solid
765-IIB-CS-SS-001	14-04-1601-3	04/22/14 10:49	1	Solid
760-IIB-P/S-SS-001	14-04-1601-4	04/22/14 10:51	1	Solid
772-IIB-P/S-CS-001	14-04-1601-5	04/22/14 13:25	1	Other
772-IIB-P/S-CS-002	14-04-1601-6	04/22/14 13:30	1	Other
770-IIB-P/S-CS-001	14-04-1601-7	04/22/14 13:34	1	Other
770-IIB-P/S-CS-002	14-04-1601-8	04/22/14 13:39	1	Other
770-IIB-P/S-O-001	14-04-1601-9	04/22/14 13:42	1	Solid
761-IIB-P/S-CS-001	14-04-1601-10	04/22/14 13:50	1	Other
761-IIB-P/S-CS-002	14-04-1601-11	04/22/14 13:54	1	Other
766-IIB-P/S-CS-001	14-04-1601-12	04/22/14 14:00	1	Other
780-IV-P/S-CS-001	14-04-1601-13	04/22/14 14:08	1	Other
778-IV-CS-CS-001	14-04-1601-14	04/22/14 14:15	1	Other
778-IV-CS-CS-002	14-04-1601-15	04/22/14 14:18	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-1601
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/22/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
768-IIB-CS-SS-001 (14-04-1601-2)						
Aroclor-1248	110		50	ug/kg	EPA 8082	EPA 3540C
765-IIB-CS-SS-001 (14-04-1601-3)						
Aroclor-1248	5100		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	450		50	ug/kg	EPA 8082	EPA 3540C
760-IIB-P/S-SS-001 (14-04-1601-4)						
Aroclor-1248	650		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	4100		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	900		250	ug/kg	EPA 8082	EPA 3540C
772-IIB-P/S-CS-001 (14-04-1601-5)						
Aroclor-1248	330		50	ug/kg	EPA 8082	EPA 3540C
770-IIB-P/S-CS-001 (14-04-1601-7)						
Aroclor-1248	370		50	ug/kg	EPA 8082	EPA 3540C
770-IIB-P/S-CS-002 (14-04-1601-8)						
Aroclor-1248	6600		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	15000		2500	ug/kg	EPA 8082	EPA 3540C
761-IIB-P/S-CS-001 (14-04-1601-10)						
Aroclor-1248	110		50	ug/kg	EPA 8082	EPA 3540C
780-IV-P/S-CS-001 (14-04-1601-13)						
Aroclor-1248	52		50	ug/kg	EPA 8082	EPA 3540C
778-IV-CS-CS-002 (14-04-1601-15)						
Aroclor-1248	120		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
pipe wrap	**14-04-1601-1-A**	**04/22/14 08:58**	**Other**	**GC 31**	**04/22/14**	**04/23/14 23:54**	**140422L18**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1000	20.0	
Aroclor-1221	ND	1000	20.0	
Aroclor-1232	ND	1000	20.0	
Aroclor-1242	ND	1000	20.0	
Aroclor-1248	ND	1000	20.0	
Aroclor-1254	ND	1000	20.0	
Aroclor-1260	ND	1000	20.0	
Aroclor-1262	ND	1000	20.0	
Aroclor-1268	ND	1000	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

768-IIB-CS-SS-001	**14-04-1601-2-A**	**04/22/14 10:48**	**Solid**	**GC 31**	**04/22/14**	**04/23/14 19:08**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	110	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	60-125	
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
765-IIB-CS-SS-001	**14-04-1601-3-A**	**04/22/14 10:49**	**Solid**	**GC 31**	**04/22/14**	**04/23/14 19:27**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	450	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	73	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

765-IIB-CS-SS-001	**14-04-1601-3-A**	**04/22/14 10:49**	**Solid**	**GC 31**	**04/22/14**	**04/24/14 15:02**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	5100	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	75	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
760-IIB-P/S-SS-001	**14-04-1601-4-A**	**04/22/14 10:51**	**Solid**	**GC 31**	**04/22/14**	**04/24/14 15:21**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	250	5.00	
Aroclor-1221	ND	250	5.00	
Aroclor-1232	ND	250	5.00	
Aroclor-1242	ND	250	5.00	
Aroclor-1248	650	250	5.00	
Aroclor-1254	ND	250	5.00	
Aroclor-1260	4100	250	5.00	
Aroclor-1262	ND	250	5.00	
Aroclor-1268	900	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	209	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

772-IIB-P/S-CS-001	**14-04-1601-5-A**	**04/22/14 13:25**	**Other**	**GC 31**	**04/22/14**	**04/23/14 20:05**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	330	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
772-IIB-P/S-CS-002	**14-04-1601-6-A**	**04/22/14 13:30**	**Other**	**GC 31**	**04/22/14**	**04/23/14 20:24**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	69	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

770-IIB-P/S-CS-001	**14-04-1601-7-A**	**04/22/14 13:34**	**Other**	**GC 31**	**04/22/14**	**04/23/14 20:43**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	370	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
770-IIB-P/S-CS-002	**14-04-1601-8-A**	**04/22/14 13:39**	**Other**	**GC 31**	**04/22/14**	**04/24/14 15:59**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	2500	50.0	
Aroclor-1221	ND	2500	50.0	
Aroclor-1232	ND	2500	50.0	
Aroclor-1242	ND	2500	50.0	
Aroclor-1248	6600	2500	50.0	
Aroclor-1254	ND	2500	50.0	
Aroclor-1260	15000	2500	50.0	
Aroclor-1262	ND	2500	50.0	
Aroclor-1268	ND	2500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	150	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	127	50-130	

770-IIB-P/S-O-001	**14-04-1601-9-A**	**04/22/14 13:42**	**Solid**	**GC 31**	**04/22/14**	**04/23/14 21:21**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	60-125	
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
761-IIB-P/S-CS-001	**14-04-1601-10-A**	**04/22/14 13:50**	**Other**	**GC 31**	**04/22/14**	**04/23/14 21:40**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	110	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

761-IIB-P/S-CS-002	**14-04-1601-11-A**	**04/22/14 13:54**	**Other**	**GC 31**	**04/22/14**	**04/23/14 21:59**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
766-IIB-P/S-CS-001	**14-04-1601-12-A**	**04/22/14 14:00**	**Other**	**GC 31**	**04/22/14**	**04/23/14 22:18**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

780-IV-P/S-CS-001	**14-04-1601-13-A**	**04/22/14 14:08**	**Other**	**GC 31**	**04/22/14**	**04/24/14 16:37**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	52	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	60-125	
2,4,5,6-Tetrachloro-m-Xylene	74	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
778-IV-CS-CS-001	**14-04-1601-14-A**	**04/22/14 14:15**	**Other**	**GC 31**	**04/22/14**	**04/23/14 22:37**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	76	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

778-IV-CS-CS-002	**14-04-1601-15-A**	**04/22/14 14:18**	**Other**	**GC 31**	**04/22/14**	**04/24/14 00:13**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	120	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-237**	**N/A**	**Solid**	**GC 31**	**04/22/14**	**04/23/14 18:48**	**140422L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
770-IIB-P/S-O-001	**Sample**	**Solid**	**GC 31**	**04/22/14**	**04/23/14 21:21**	**140422S18**
770-IIB-P/S-O-001	**Matrix Spike**	**Solid**	**GC 31**	**04/22/14**	**04/23/14 22:57**	**140422S18**
770-IIB-P/S-O-001	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/22/14**	**04/23/14 23:16**	**140422S18**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	99.54	100	97.15	97	50-135	2	0-25	
Aroclor-1260	ND	100.0	104.7	105	101.9	102	50-135	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/22/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1601
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-237	**LCS**	**Solid**	**GC 31**	**04/22/14**	**04/23/14 18:29**	**140422L18**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	111.2	111	50-135	
Aroclor-1260	100.0	104.3	104	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-1601

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-1601

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31316

PROJECT NAME: Pechiney			DATE: 4-22-14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-04-1601
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES: EPA 8082

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-22-14	0858	pipe wrap	X	4 oz glass jar	O			X		1	
2		1048	768-11B-CS-SS-001	X		S			X		1	
3		1049	765-11B-CS-SS-001	X		S			X		1	
4		1051	760-11B-P/S-SS-001	X		S			X		1	
5		1325	772-11B-P/S-CS-001	X		O			X		1	
6		1330	772-11B-P/S-CS-002	X		O			X		1	
7		1334	770-11B-P/S-CS-001	X		O			X		1	
8		1339	770-11B-P/S-CS-002	X		O			X		1	
9		1342	770-11B-P/S-O-001	X		S			X		1	
10		1350	761-11B-P/S-CS-001	X		O			X		1	
11		1354	772-11B-P/S-CS-002	X		O			X		1	
12		1400	766-11B-P/S-CS-001	X		O			X		1	
13		1408	780-IV-P/S-CS-001	X		O			X		1	
14		1415	778-IV-P/S-CS-001	X		O			X		1	
15		1418	778-IV-CS-CS-002	X		O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	4/22/14	1459	SIGNATURE: Alex Mayer PRINTED NAME: Alex Mayer COMPANY: CTL	4/22/14	1459
SIGNATURE: Alex Mayer PRINTED NAME: Alex Mayer COMPANY: CTL	4/22/14	1645	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CTL	4/22/14	16:45
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS: temp blank included

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-1601

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/22/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** LW3

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** LW3

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-1826

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/28/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Pechiney / 0106270030
Work Order Number: 14-04-1826

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-1826 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/24/14. They were assigned to Work Order 14-04-1826.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-1826
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/24/14 16:55
		Number of Containers:	12
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
784-IV-CS-CS-001	14-04-1826-1	04/24/14 07:50	1	Other
787-IV-CS-CS-001	14-04-1826-2	04/24/14 07:54	1	Other
785-IV-CS-CS-001	14-04-1826-3	04/24/14 08:00	1	Other
786-IV-CS-CS-001	14-04-1826-4	04/24/14 08:09	1	Other
757-IV-P/S-SS-004	14-04-1826-5	04/24/14 10:04	1	Solid
757-IV-P/S-SS-005	14-04-1826-6	04/24/14 10:05	1	Solid
757-IV-P/S-SS-006	14-04-1826-7	04/24/14 10:06	1	Solid
739-IV-CS-SS-002	14-04-1826-8	04/24/14 10:11	1	Solid
802-IV-O-SS-001	14-04-1826-9	04/24/14 13:00	1	Solid
802-IV-O-SS-002	14-04-1826-10	04/24/14 13:02	1	Solid
802-IV-O-SS-003	14-04-1826-11	04/24/14 13:04	1	Solid
802-IV-O-SS-004	14-04-1826-12	04/24/14 13:06	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-04-1826 Pechiney / 0106270030 04/24/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
802-IV-O-SS-001 (14-04-1826-9)						
Aroclor-1248	91		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
784-IV-CS-CS-001	**14-04-1826-1-A**	**04/24/14 07:50**	**Other**	**GC 31**	**04/24/14**	**04/25/14 23:04**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

787-IV-CS-CS-001	**14-04-1826-2-A**	**04/24/14 07:54**	**Other**	**GC 31**	**04/24/14**	**04/25/14 23:23**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
785-IV-CS-CS-001	**14-04-1826-3-A**	**04/24/14 08:00**	**Other**	**GC 31**	**04/24/14**	**04/25/14 23:42**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

786-IV-CS-CS-001	**14-04-1826-4-A**	**04/24/14 08:09**	**Other**	**GC 31**	**04/24/14**	**04/26/14 00:01**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
757-IV-P/S-SS-004	**14-04-1826-5-A**	**04/24/14 10:04**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 00:58**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

757-IV-P/S-SS-005	**14-04-1826-6-A**	**04/24/14 10:05**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 01:17**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
757-IV-P/S-SS-006	**14-04-1826-7-A**	**04/24/14 10:06**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 01:37**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

739-IV-CS-SS-002	**14-04-1826-8-A**	**04/24/14 10:11**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 01:56**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
802-IV-O-SS-001	**14-04-1826-9-A**	**04/24/14 13:00**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 02:15**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	91	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

802-IV-O-SS-002	**14-04-1826-10-A**	**04/24/14 13:02**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 02:34**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
802-IV-O-SS-003	**14-04-1826-11-A**	**04/24/14 13:04**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 02:53**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

802-IV-O-SS-004	**14-04-1826-12-A**	**04/24/14 13:06**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 03:12**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-239**	**N/A**	**Solid**	**GC 31**	**04/24/14**	**04/25/14 19:34**	**140424L13A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
802-IV-O-SS-004	**Sample**	**Solid**	**GC 31**	**04/24/14**	**04/26/14 03:12**	**140424S13A**
802-IV-O-SS-004	**Matrix Spike**	**Solid**	**GC 31**	**04/24/14**	**04/25/14 22:26**	**140424S13A**
802-IV-O-SS-004	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**04/24/14**	**04/25/14 22:45**	**140424S13A**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	103.2	103	111.3	111	50-135	8	0-25	
Aroclor-1260	ND	100.0	142.9	143	146.7	147	50-135	3	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/24/14
121 Innovation Drive, Suite 200		Work Order:	14-04-1826
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-239	**LCS**	**Solid**	**GC 31**	**04/24/14**	**04/25/14 19:15**	**140424L13A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	99.34	99	50-135	
Aroclor-1260	100.0	107.1	107	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-1826

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-1826

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31319

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney

DATE: 4-24-14 | PAGE 1 OF 1

PROJECT NUMBER: 6106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

14-04-1826

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-24-14	0750	784-IV-CS-CS-001	X	4oz glass jar	O			X		1	concrete
2		0754	787-IV-CS-CS-001	X		O			X		1	
3		0800	785-IV-CS-CS-001	X		O			X		1	
4		0809	786-IV-CS-CS-001	X		O			X		1	
5		1004	757-IV-P/S-SS-004	X		S			X		1	
6		1005	757-IV-P/S-SS-005	X		S			X		1	
7		1006	757-IV-P/S-SS-006	X		S			X		1	
8		1011	739-IV-CS-SS-002	X		S			X		1	
9		1300	802-IV-O-SS-001	X		S			X		1	
10		1302	802-IV-O-SS-002	X		S			X		1	
11		1304	802-IV-O-SS-003	X		S			X		1	
12		1306	802-IV-O-SS-004	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/24/14	1400	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/24/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/24/14	1515	SIGNATURE: PRINTED NAME: D. Pearson COMPANY: CEL	4/24/14	1515
SIGNATURE: PRINTED NAME: D. Pearson COMPANY: CEL	4/24/14	16:55	SIGNATURE: Danny Le PRINTED NAME: DANNY COMPANY:	4/24/14	16:55

TOTAL NUMBER OF CONTAINERS: 12

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-1826

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/24/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 603

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 603

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 603

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-2062

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 04/30/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-2062

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-2062 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/28/14. They were assigned to Work Order 14-04-2062.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-2062
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/28/14 17:00
		Number of Containers:	16
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#990	14-04-2062-1	04/28/14 08:46	1	Solid
#991	14-04-2062-2	04/28/14 08:49	1	Solid
#992	14-04-2062-3	04/28/14 08:51	1	Solid
#993	14-04-2062-4	04/28/14 08:53	1	Solid
#994	14-04-2062-5	04/28/14 08:55	1	Solid
#995	14-04-2062-6	04/28/14 08:57	1	Solid
#996	14-04-2062-7	04/28/14 09:00	1	Solid
#997	14-04-2062-8	04/28/14 09:02	1	Solid
801-IV-P/S-CS-001	14-04-2062-9	04/28/14 10:02	1	Other
801-IV-P/S-CS-002	14-04-2062-10	04/28/14 10:07	1	Other
799-IV-CS-CS-001	14-04-2062-11	04/28/14 10:12	1	Other
799-IV-CS-CS-002	14-04-2062-12	04/28/14 10:59	1	Other
801-IV-P/S-CS-003	14-04-2062-13	04/28/14 11:10	1	Other
801-IV-P/S-CS-004	14-04-2062-14	04/28/14 11:17	1	Other
799-IV-CS-CS-004	14-04-2062-15	04/28/14 11:28	1	Other
799-IV-CS-CS-003	14-04-2062-16	04/28/14 11:36	1	Other

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-2062
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/28/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#990 (14-04-2062-1)						
Arsenic	2.98		0.721	mg/kg	EPA 6010B	EPA 3050B
Barium	117		0.481	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.399		0.240	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.532		0.481	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.7		0.240	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.9		0.240	mg/kg	EPA 6010B	EPA 3050B
Copper	19.2		0.481	mg/kg	EPA 6010B	EPA 3050B
Lead	12.3		0.481	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.342		0.240	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.9		0.240	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.3		0.240	mg/kg	EPA 6010B	EPA 3050B
Zinc	59.7		0.962	mg/kg	EPA 6010B	EPA 3050B
C8	170		98	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	6500		98	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	590		98	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	200		98	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	380		98	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	790		98	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	540		98	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	320		98	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	9600		98	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-2062
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/28/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#991 (14-04-2062-2)						
Arsenic	2.58		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	122		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.423		0.246	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.597		0.493	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.4		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.2		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	20.7		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	11.5		0.493	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.443		0.246	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.2		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.6		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	65.3		0.985	mg/kg	EPA 6010B	EPA 3050B
C9-C10	1800		51	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	250		51	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	270		51	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	510		51	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	1100		51	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	860		51	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	220		51	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	78		51	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	5100		51	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-2062
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/28/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#992 (14-04-2062-3)						
Arsenic	2.21		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	119		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.416		0.250	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.511		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	18.7		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	4.19		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.589		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	55.2		1.00	mg/kg	EPA 6010B	EPA 3050B
C9-C10	1700		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	250		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	26		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	27		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	27		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	140		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	110		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	38		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2400		25	mg/kg	EPA 8015B (M)	EPA 3550B
#993 (14-04-2062-4)						
Arsenic	2.01		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	118		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.411		0.249	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.516		0.498	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.8		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.9		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	18.4		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	4.20		0.498	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.334		0.249	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.9		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.4		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	55.0		0.995	mg/kg	EPA 6010B	EPA 3050B
C25-C28	43		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	51		5.1	mg/kg	EPA 8015B (M)	EPA 3550B

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-2062
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/28/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#994 (14-04-2062-5)						
Arsenic	1.94		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	118		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.426		0.253	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.514		0.505	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.5		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.9		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	19.9		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	52.5		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.562		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.1		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	67.9		1.01	mg/kg	EPA 6010B	EPA 3050B
C25-C28	53		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	6.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	6.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	66		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1268	73		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-2062
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/28/14
Attn:	Linda Conlan		Page 5 of 6

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#995 (14-04-2062-6)						
Arsenic	3.21		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	125		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.384		0.250	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.615		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	20.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	11.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.457		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	68.1		1.00	mg/kg	EPA 6010B	EPA 3050B
C19-C20	5.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	5.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	6.1		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	56		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	7.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	110		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	230		50	ug/kg	EPA 8082	EPA 3540C
#996 (14-04-2062-7)						
Arsenic	2.66		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	124		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.423		0.249	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.627		0.498	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.6		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	21.0		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	13.4		0.498	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.447		0.249	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.0		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.0		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	77.0		0.995	mg/kg	EPA 6010B	EPA 3050B
C25-C28	51		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	51		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-2062
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/28/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#997 (14-04-2062-8)						
Arsenic	2.10		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	127		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.358		0.251	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.512		0.503	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.0		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.7		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	18.3		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	3.46		0.503	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.8		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.0		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	55.8		1.01	mg/kg	EPA 6010B	EPA 3050B
C8	53		50	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	5200		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	710		50	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	53		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	54		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	6100		50	mg/kg	EPA 8015B (M)	EPA 3550B
801-IV-P/S-CS-001 (14-04-2062-9)						
Aroclor-1248	1500		250	ug/kg	EPA 8082	EPA 3540C
799-IV-CS-CS-002 (14-04-2062-12)						
Aroclor-1268	92		50	ug/kg	EPA 8082	EPA 3540C
801-IV-P/S-CS-004 (14-04-2062-14)						
Aroclor-1248	580		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#990	**14-04-2062-1-A**	**04/28/14 08:46**	**Solid**	**GC 45**	**04/29/14**	**04/30/14 09:49**	**140429B03A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	98	19.6	
C7	ND	98	19.6	
C8	170	98	19.6	
C9-C10	6500	98	19.6	
C11-C12	590	98	19.6	
C13-C14	ND	98	19.6	
C15-C16	ND	98	19.6	
C17-C18	ND	98	19.6	
C19-C20	ND	98	19.6	
C21-C22	ND	98	19.6	
C23-C24	200	98	19.6	
C25-C28	380	98	19.6	
C29-C32	790	98	19.6	
C33-C36	540	98	19.6	
C37-C40	320	98	19.6	
C41-C44	ND	98	19.6	
C6-C44 Total	9600	98	19.6	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	121	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#991	**14-04-2062-2-A**	**04/28/14 08:49**	**Solid**	**GC 45**	**04/29/14**	**04/30/14 10:08**	**140429B03A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	51	10.1	
C7	ND	51	10.1	
C8	ND	51	10.1	
C9-C10	1800	51	10.1	
C11-C12	250	51	10.1	
C13-C14	ND	51	10.1	
C15-C16	ND	51	10.1	
C17-C18	ND	51	10.1	
C19-C20	ND	51	10.1	
C21-C22	ND	51	10.1	
C23-C24	270	51	10.1	
C25-C28	510	51	10.1	
C29-C32	1100	51	10.1	
C33-C36	860	51	10.1	
C37-C40	220	51	10.1	
C41-C44	78	51	10.1	
C6-C44 Total	5100	51	10.1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	135	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#992	**14-04-2062-3-A**	**04/28/14 08:51**	**Solid**	**GC 45**	**04/29/14**	**04/30/14 10:25**	**140429B03A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.04	
C7	ND	25	5.04	
C8	ND	25	5.04	
C9-C10	1700	25	5.04	
C11-C12	250	25	5.04	
C13-C14	ND	25	5.04	
C15-C16	ND	25	5.04	
C17-C18	26	25	5.04	
C19-C20	ND	25	5.04	
C21-C22	27	25	5.04	
C23-C24	27	25	5.04	
C25-C28	120	25	5.04	
C29-C32	140	25	5.04	
C33-C36	110	25	5.04	
C37-C40	38	25	5.04	
C41-C44	ND	25	5.04	
C6-C44 Total	2400	25	5.04	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	139	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#993	**14-04-2062-4-A**	**04/28/14 08:53**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 16:06**	**140429B03A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.02	
C7	ND	5.1	1.02	
C8	ND	5.1	1.02	
C9-C10	ND	5.1	1.02	
C11-C12	ND	5.1	1.02	
C13-C14	ND	5.1	1.02	
C15-C16	ND	5.1	1.02	
C17-C18	ND	5.1	1.02	
C19-C20	ND	5.1	1.02	
C21-C22	ND	5.1	1.02	
C23-C24	ND	5.1	1.02	
C25-C28	43	5.1	1.02	
C29-C32	ND	5.1	1.02	
C33-C36	ND	5.1	1.02	
C37-C40	ND	5.1	1.02	
C41-C44	ND	5.1	1.02	
C6-C44 Total	51	5.1	1.02	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#994	**14-04-2062-5-A**	**04/28/14 08:55**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 16:25**	**140429B03A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	53	5.0	1.00	
C29-C32	6.5	5.0	1.00	
C33-C36	6.2	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	66	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	125	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#995	**14-04-2062-6-A**	**04/28/14 08:57**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 16:42**	**140429B03A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	5.7	5.0	1.00	
C21-C22	5.7	5.0	1.00	
C23-C24	6.1	5.0	1.00	
C25-C28	56	5.0	1.00	
C29-C32	16	5.0	1.00	
C33-C36	14	5.0	1.00	
C37-C40	7.5	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	110	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#996	**14-04-2062-7-A**	**04/28/14 09:00**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 17:01**	**140429B03A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	51	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	51	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	126	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#997	**14-04-2062-8-A**	**04/28/14 09:02**	**Solid**	**GC 45**	**04/29/14**	**04/30/14 11:03**	**140429B03A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	53	50	10.0	
C9-C10	5200	50	10.0	
C11-C12	710	50	10.0	
C13-C14	53	50	10.0	
C15-C16	ND	50	10.0	
C17-C18	ND	50	10.0	
C19-C20	ND	50	10.0	
C21-C22	ND	50	10.0	
C23-C24	ND	50	10.0	
C25-C28	54	50	10.0	
C29-C32	ND	50	10.0	
C33-C36	ND	50	10.0	
C37-C40	ND	50	10.0	
C41-C44	ND	50	10.0	
C6-C44 Total	6100	50	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	136	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-872**	**N/A**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 13:20**	**140429B03A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	127	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#990	**14-04-2062-1-A**	**04/28/14 08:46**	**Solid**	**ICP 7300**	**04/28/14**	**04/29/14 12:09**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.721	0.962	
Arsenic	2.98	0.721	0.962	
Barium	117	0.481	0.962	
Beryllium	0.399	0.240	0.962	
Cadmium	0.532	0.481	0.962	
Chromium	15.7	0.240	0.962	
Cobalt	10.9	0.240	0.962	
Copper	19.2	0.481	0.962	
Lead	12.3	0.481	0.962	
Molybdenum	0.342	0.240	0.962	
Nickel	11.9	0.240	0.962	
Selenium	ND	0.721	0.962	
Silver	ND	0.240	0.962	
Thallium	ND	0.721	0.962	
Vanadium	35.3	0.240	0.962	
Zinc	59.7	0.962	0.962	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#991	**14-04-2062-2-A**	**04/28/14 08:49**	**Solid**	**ICP 7300**	**04/28/14**	**04/29/14 12:10**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	2.58	0.739	0.985	
Barium	122	0.493	0.985	
Beryllium	0.423	0.246	0.985	
Cadmium	0.597	0.493	0.985	
Chromium	16.4	0.246	0.985	
Cobalt	11.2	0.246	0.985	
Copper	20.7	0.493	0.985	
Lead	11.5	0.493	0.985	
Molybdenum	0.443	0.246	0.985	
Nickel	12.2	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	37.6	0.246	0.985	
Zinc	65.3	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#992	**14-04-2062-3-A**	**04/28/14 08:51**	**Solid**	**ICP 7300**	**04/28/14**	**04/29/14 12:11**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	2.21	0.750	1.00	
Barium	119	0.500	1.00	
Beryllium	0.416	0.250	1.00	
Cadmium	0.511	0.500	1.00	
Chromium	15.9	0.250	1.00	
Cobalt	11.1	0.250	1.00	
Copper	18.7	0.500	1.00	
Lead	4.19	0.500	1.00	
Molybdenum	0.589	0.250	1.00	
Nickel	11.9	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	37.5	0.250	1.00	
Zinc	55.2	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#993	**14-04-2062-4-A**	**04/28/14 08:53**	**Solid**	**ICP 7300**	**04/28/14**	**04/29/14 12:13**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	2.01	0.746	0.995	
Barium	118	0.498	0.995	
Beryllium	0.411	0.249	0.995	
Cadmium	0.516	0.498	0.995	
Chromium	15.8	0.249	0.995	
Cobalt	10.9	0.249	0.995	
Copper	18.4	0.498	0.995	
Lead	4.20	0.498	0.995	
Molybdenum	0.334	0.249	0.995	
Nickel	11.9	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	36.4	0.249	0.995	
Zinc	55.0	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#994	**14-04-2062-5-A**	**04/28/14 08:55**	**Solid**	**ICP 7300**	**04/28/14**	**04/29/14 12:14**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	1.94	0.758	1.01	
Barium	118	0.505	1.01	
Beryllium	0.426	0.253	1.01	
Cadmium	0.514	0.505	1.01	
Chromium	16.5	0.253	1.01	
Cobalt	10.9	0.253	1.01	
Copper	19.9	0.505	1.01	
Lead	52.5	0.505	1.01	
Molybdenum	0.562	0.253	1.01	
Nickel	12.1	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	37.2	0.253	1.01	
Zinc	67.9	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#995	**14-04-2062-6-A**	**04/28/14 08:57**	**Solid**	**ICP 7300**	**04/28/14**	**04/29/14 12:15**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	3.21	0.750	1.00	
Barium	125	0.500	1.00	
Beryllium	0.384	0.250	1.00	
Cadmium	0.615	0.500	1.00	
Chromium	16.0	0.250	1.00	
Cobalt	10.8	0.250	1.00	
Copper	20.3	0.500	1.00	
Lead	11.8	0.500	1.00	
Molybdenum	0.457	0.250	1.00	
Nickel	12.0	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	35.0	0.250	1.00	
Zinc	68.1	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#996	**14-04-2062-7-A**	**04/28/14 09:00**	**Solid**	**ICP 7300**	**04/28/14**	**04/29/14 12:16**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	2.66	0.746	0.995	
Barium	124	0.498	0.995	
Beryllium	0.423	0.249	0.995	
Cadmium	0.627	0.498	0.995	
Chromium	17.1	0.249	0.995	
Cobalt	11.6	0.249	0.995	
Copper	21.0	0.498	0.995	
Lead	13.4	0.498	0.995	
Molybdenum	0.447	0.249	0.995	
Nickel	13.0	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	38.0	0.249	0.995	
Zinc	77.0	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#997	**14-04-2062-8-A**	**04/28/14 09:02**	**Solid**	**ICP 7300**	**04/28/14**	**04/29/14 12:17**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	2.10	0.754	1.01	
Barium	127	0.503	1.01	
Beryllium	0.358	0.251	1.01	
Cadmium	0.512	0.503	1.01	
Chromium	17.0	0.251	1.01	
Cobalt	11.7	0.251	1.01	
Copper	18.3	0.503	1.01	
Lead	3.46	0.503	1.01	
Molybdenum	ND	0.251	1.01	
Nickel	12.8	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	36.0	0.251	1.01	
Zinc	55.8	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18325**	**N/A**	**Solid**	**ICP 7300**	**04/28/14**	**04/28/14 19:58**	**140428L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#990	**14-04-2062-1-A**	**04/28/14 08:46**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:41**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

#991	**14-04-2062-2-A**	**04/28/14 08:49**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:43**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

#992	**14-04-2062-3-A**	**04/28/14 08:51**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:45**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

#993	**14-04-2062-4-A**	**04/28/14 08:53**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:52**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

#994	**14-04-2062-5-A**	**04/28/14 08:55**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:54**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

#995	**14-04-2062-6-A**	**04/28/14 08:57**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:56**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

#996	**14-04-2062-7-A**	**04/28/14 09:00**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:59**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

#997	**14-04-2062-8-A**	**04/28/14 09:02**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 12:01**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-198**	**N/A**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:25**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#990	**14-04-2062-1-A**	**04/28/14 08:46**	**Solid**	**GC 58**	**04/28/14**	**04/30/14 14:21**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

#991	**14-04-2062-2-A**	**04/28/14 08:49**	**Solid**	**GC 58**	**04/28/14**	**04/30/14 14:39**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#992	**14-04-2062-3-A**	**04/28/14 08:51**	**Solid**	**GC 58**	**04/28/14**	**04/30/14 14:57**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

#993	**14-04-2062-4-A**	**04/28/14 08:53**	**Solid**	**GC 58**	**04/28/14**	**04/29/14 22:18**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#994	**14-04-2062-5-A**	**04/28/14 08:55**	**Solid**	**GC 58**	**04/28/14**	**04/30/14 15:15**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	73	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

#995	**14-04-2062-6-A**	**04/28/14 08:57**	**Solid**	**GC 58**	**04/28/14**	**04/29/14 22:54**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	230	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#996	**14-04-2062-7-A**	**04/28/14 09:00**	**Solid**	**GC 58**	**04/28/14**	**04/29/14 23:12**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

#997	**14-04-2062-8-A**	**04/28/14 09:02**	**Solid**	**GC 58**	**04/28/14**	**04/30/14 15:32**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
801-IV-P/S-CS-001	**14-04-2062-9-A**	**04/28/14 10:02**	**Other**	**GC 58**	**04/28/14**	**04/30/14 00:42**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	68	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

801-IV-P/S-CS-001	**14-04-2062-9-A**	**04/28/14 10:02**	**Other**	**GC 58**	**04/28/14**	**04/30/14 15:50**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1500	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
801-IV-P/S-CS-002	**14-04-2062-10-A**	**04/28/14 10:07**	**Other**	**GC 58**	**04/28/14**	**04/30/14 01:00**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

799-IV-CS-CS-001	**14-04-2062-11-A**	**04/28/14 10:12**	**Other**	**GC 58**	**04/28/14**	**04/30/14 01:18**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
799-IV-CS-CS-002	**14-04-2062-12-A**	**04/28/14 10:59**	**Other**	**GC 58**	**04/28/14**	**04/30/14 01:36**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	92	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

801-IV-P/S-CS-003	**14-04-2062-13-A**	**04/28/14 11:10**	**Other**	**GC 58**	**04/28/14**	**04/30/14 01:54**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
801-IV-P/S-CS-004	**14-04-2062-14-A**	**04/28/14 11:17**	**Other**	**GC 58**	**04/28/14**	**04/30/14 02:12**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	580	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	72	60-125	
2,4,5,6-Tetrachloro-m-Xylene	70	50-130	

799-IV-CS-CS-004	**14-04-2062-15-A**	**04/28/14 11:28**	**Other**	**GC 58**	**04/28/14**	**04/30/14 02:30**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
799-IV-CS-CS-003	**14-04-2062-16-A**	**04/28/14 11:36**	**Other**	**GC 58**	**04/28/14**	**04/30/14 02:48**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

Method Blank	**099-02-003-240**	**N/A**	**Solid**	**GC 58**	**04/28/14**	**04/29/14 20:48**	**140428L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-2029-1	**Sample**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 14:34**	**140429S03**
14-04-2029-1	**Matrix Spike**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 13:58**	**140429S03**
14-04-2029-1	**Matrix Spike Duplicate**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 14:15**	**140429S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	428.5	107	497.1	124	55-133	15	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1925-3	**Sample**	**Solid**	**ICP 7300**	**04/28/14**	**04/28/14 20:01**	**140428S06**
14-04-1925-3	**Matrix Spike**	**Solid**	**ICP 7300**	**04/28/14**	**04/28/14 20:02**	**140428S06**
14-04-1925-3	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/28/14**	**04/28/14 20:03**	**140428S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	12.97	52	15.94	64	50-115	21	0-20	4
Arsenic	2.057	25.00	26.95	100	27.66	102	75-125	3	0-20	
Barium	33.36	25.00	60.93	110	54.16	83	75-125	12	0-20	
Beryllium	0.3933	25.00	26.75	105	26.99	106	75-125	1	0-20	
Cadmium	ND	25.00	26.14	105	26.50	106	75-125	1	0-20	
Chromium	10.82	25.00	38.16	109	36.16	101	75-125	5	0-20	
Cobalt	2.713	25.00	30.15	110	30.45	111	75-125	1	0-20	
Copper	7.905	25.00	35.88	112	35.32	110	75-125	2	0-20	
Lead	2.644	25.00	28.00	101	29.20	106	75-125	4	0-20	
Molybdenum	0.3892	25.00	23.54	93	24.53	97	75-125	4	0-20	
Nickel	8.650	25.00	36.11	110	35.82	109	75-125	1	0-20	
Selenium	ND	25.00	22.55	90	22.87	91	75-125	1	0-20	
Silver	ND	12.50	12.58	101	12.73	102	75-125	1	0-20	
Thallium	ND	25.00	24.06	96	25.73	103	75-125	7	0-20	
Vanadium	18.55	25.00	49.36	123	43.21	99	75-125	13	0-20	
Zinc	25.73	25.00	57.82	128	54.00	113	75-125	7	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-2029-1	**Sample**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:29**	**140429S02**
14-04-2029-1	**Matrix Spike**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:34**	**140429S02**
14-04-2029-1	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:36**	**140429S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7628	91	0.7579	91	71-137	1	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
801-IV-P/S-CS-001	**Sample**	**Other**	**GC 58**	**04/28/14**	**04/30/14 00:42**	**140428S11**
801-IV-P/S-CS-001	**Matrix Spike**	**Other**	**GC 58**	**04/28/14**	**04/30/14 03:06**	**140428S11**
801-IV-P/S-CS-001	**Matrix Spike Duplicate**	**Other**	**GC 58**	**04/28/14**	**04/30/14 03:24**	**140428S11**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	695.2	695	735.3	735	50-135	6	0-25	3
Aroclor-1260	ND	100.0	2000	2000	1851	1851	50-135	8	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-872	**LCS**	**Solid**	**GC 45**	**04/29/14**	**04/29/14 13:40**	**140429B03A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	411.4	103	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18325	**LCS**	**Solid**	**ICP 7300**	**04/28/14**	**04/28/14 19:59**	**140428L06**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.37	105	80-120	73-127	
Arsenic	25.00	24.50	98	80-120	73-127	
Barium	25.00	25.06	100	80-120	73-127	
Beryllium	25.00	25.39	102	80-120	73-127	
Cadmium	25.00	26.38	106	80-120	73-127	
Chromium	25.00	25.64	103	80-120	73-127	
Cobalt	25.00	28.04	112	80-120	73-127	
Copper	25.00	26.63	107	80-120	73-127	
Lead	25.00	26.19	105	80-120	73-127	
Molybdenum	25.00	25.49	102	80-120	73-127	
Nickel	25.00	26.86	107	80-120	73-127	
Selenium	25.00	22.99	92	80-120	73-127	
Silver	12.50	12.64	101	80-120	73-127	
Thallium	25.00	27.65	111	80-120	73-127	
Vanadium	25.00	24.83	99	80-120	73-127	
Zinc	25.00	26.53	106	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-198	**LCS**	**Solid**	**Mercury 05**	**04/29/14**	**04/29/14 11:27**	**140429L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7595	91	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/28/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2062
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-240	**LCS**	**Solid**	**GC 58**	**04/28/14**	**04/29/14 20:30**	**140428L11**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	82.68	83	50-135	
Aroclor-1260	100.0	106.4	106	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-2062

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	598	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8015B (M)	EPA 3550B	682	GC 45	1
EPA 8082	EPA 3540C	669	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-2062 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31320

PROJECT NAME: Pechiney			DATE: 4-28-14 PAGE 1 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC Irvine office	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-04-2062
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-28-14	0846	#990	X	X	X	4 oz glass jar	S			X		1	
2		0849	#991	X	X	X		S			X		1	
3		0851	#992	X	X	X		S			X		1	
4		0853	#993	X	X	X		S			X		1	
5		0855	#994	X	X	X		S			X		1	
6		0857	#995	X	X	X		S			X		1	
7		0900	#996	X	X	X		S			X		1	
8		0902	#997	X	X	X		S			X		1	
9		1002	801-IV-P/S-CS-001	X				O			X		1	concrete
10		1007	801-IV-P/S-CS-002	X				O			X		1	
11		1012	799-IV-CS-CS-001	X				O			X		1	
12		1059	799-IV-CS-CS-002	X				O			X		1	
13		1110	801-IV-P/S-CS-003	X				O			X		1	
14		1117	801-IV-P/S-CS-004	X				O			X		1	
15		1128	799-IV-CS-CS-004	X				O			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Stephen Tsang COMPANY: AMEC	4/28/14	1515	SIGNATURE: [signature] PRINTED NAME: Alex Marquez COMPANY: CEL	4/28/14	1515
SIGNATURE: [signature] PRINTED NAME: Alex Marquez COMPANY: CEL	4/28/14	1700	SIGNATURE: [signature] PRINTED NAME: Noel Cruse COMPANY: CEL	4/28/14	1700
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 15/16

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 31321

PROJECT NAME: Pechiney			DATE: 4-28-14 PAGE 2 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			2062
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky, S Hwang

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	4-28-14	1136	799-IV-CS-CS-003	X	4 oz glass jar	O			X		1	concrete

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	4/28/14	1575	SIGNATURE:	4/28/14	1515
PRINTED NAME: S Hwang			PRINTED NAME: Alex Marquez		
COMPANY: AMEC			COMPANY: CEL		
SIGNATURE:	4/28/14	1700	SIGNATURE:	4/28/14	1700
PRINTED NAME: Alex Marquez			PRINTED NAME: Noel Cruise		
COMPANY: CEL			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 1/16

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-2062

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/28/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 0.7 °C - 0.3 °C (CF) = 0.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 300

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 300

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-04-2142

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/01/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-04-2142

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-04-2142 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/29/14. They were assigned to Work Order 14-04-2142.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-04-2142
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	04/29/14 17:30
		Number of Containers:	17
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#998	14-04-2142-1	04/28/14 15:00	1	Solid
#999	14-04-2142-2	04/28/14 15:02	1	Solid
#1000	14-04-2142-3	04/28/14 15:08	1	Solid
#1001	14-04-2142-4	04/28/14 15:10	1	Solid
#1002	14-04-2142-5	04/28/14 15:12	1	Solid
#1003	14-04-2142-6	04/28/14 15:13	1	Solid
#1004	14-04-2142-7	04/28/14 15:14	1	Solid
770-IIB-P/S-SS-003	14-04-2142-8	04/28/14 15:21	1	Solid
772-IIB-P/S-SS-002	14-04-2142-9	04/28/14 15:27	1	Solid
#986	14-04-2142-10	04/29/14 07:25	1	Solid
#987	14-04-2142-11	04/29/14 07:27	1	Solid
802-IV-O-SS-005	14-04-2142-12	04/29/14 13:30	1	Solid
750-I-O-SS-001	14-04-2142-13	04/29/14 13:41	1	Solid
750-I-O-SS-002	14-04-2142-14	04/29/14 13:48	1	Solid
750-I-O-SS-003	14-04-2142-15	04/29/14 13:49	1	Solid
750-I-O-SS-004	14-04-2142-16	04/29/14 13:54	1	Solid
750-I-O-SS-005	14-04-2142-17	04/29/14 13:56	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-2142
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/29/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#998 (14-04-2142-1)						
Arsenic	1.57		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	124		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.414		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.6		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.7		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	25.2		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	4.81		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.5		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.7		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	51.9		0.990	mg/kg	EPA 6010B	EPA 3050B
#999 (14-04-2142-2)						
Arsenic	1.80		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	123		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.360		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.2		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.3		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	16.3		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	2.33		0.510	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.3		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.5		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	46.0		1.02	mg/kg	EPA 6010B	EPA 3050B
#1002 (14-04-2142-5)						
Aroclor-1248	90		50	ug/kg	EPA 8082	EPA 3540C
#1003 (14-04-2142-6)						
Aroclor-1248	120		51	ug/kg	EPA 8082	EPA 3540C
772-IIB-P/S-SS-002 (14-04-2142-9)						
Aroclor-1248	540		51	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	55		51	ug/kg	EPA 8082	EPA 3540C
#986 (14-04-2142-10)						
Aroclor-1248	13000		5100	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	860		51	ug/kg	EPA 8082	EPA 3540C
#987 (14-04-2142-11)						
Aroclor-1248	2400		500	ug/kg	EPA 8082	EPA 3540C
750-I-O-SS-001 (14-04-2142-13)						
Aroclor-1248	2100		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	360		50	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-04-2142
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	04/29/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
750-I-O-SS-002 (14-04-2142-14)						
Aroclor-1248	64		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	92		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	70		50	ug/kg	EPA 8082	EPA 3540C
750-I-O-SS-003 (14-04-2142-15)						
Aroclor-1254	130		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	150		50	ug/kg	EPA 8082	EPA 3540C
750-I-O-SS-005 (14-04-2142-17)						
Aroclor-1248	120		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	130		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	50		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#998	**14-04-2142-1-A**	**04/28/14 15:00**	**Solid**	**ICP 7300**	**04/29/14**	**04/29/14 19:30**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	1.57	0.743	0.990	
Barium	124	0.495	0.990	
Beryllium	0.414	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	16.6	0.248	0.990	
Cobalt	10.7	0.248	0.990	
Copper	25.2	0.495	0.990	
Lead	4.81	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	12.5	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	33.7	0.248	0.990	
Zinc	51.9	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#999	**14-04-2142-2-A**	**04/28/14 15:02**	**Solid**	**ICP 7300**	**04/29/14**	**04/29/14 19:32**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	1.80	0.765	1.02	
Barium	123	0.510	1.02	
Beryllium	0.360	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	15.2	0.255	1.02	
Cobalt	10.3	0.255	1.02	
Copper	16.3	0.510	1.02	
Lead	2.33	0.510	1.02	
Molybdenum	ND	0.255	1.02	
Nickel	11.3	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	30.5	0.255	1.02	
Zinc	46.0	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18332**	**N/A**	**Solid**	**ICP 7300**	**04/29/14**	**04/29/14 19:37**	**140429L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#998	**14-04-2142-1-A**	**04/28/14 15:00**	**Solid**	**Mercury 05**	**04/30/14**	**04/30/14 12:40**	**140430L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#999	**14-04-2142-2-A**	**04/28/14 15:02**	**Solid**	**Mercury 05**	**04/30/14**	**04/30/14 12:43**	**140430L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-199**	**N/A**	**Solid**	**Mercury 05**	**04/30/14**	**04/30/14 11:20**	**140430L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#998	**14-04-2142-1-A**	**04/28/14 15:00**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 21:50**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

#999	**14-04-2142-2-A**	**04/28/14 15:02**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 22:08**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1000	**14-04-2142-3-A**	**04/28/14 15:08**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 22:26**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

#1001	**14-04-2142-4-A**	**04/28/14 15:10**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 22:44**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1002	**14-04-2142-5-A**	**04/28/14 15:12**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 23:20**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	90	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

#1003	**14-04-2142-6-A**	**04/28/14 15:13**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 23:38**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	120	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1004	**14-04-2142-7-A**	**04/28/14 15:14**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 23:56**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

770-IIB-P/S-SS-003	**14-04-2142-8-A**	**04/28/14 15:21**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 00:13**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
772-IIB-P/S-SS-002	**14-04-2142-9-A**	**04/28/14 15:27**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 00:32**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	540	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	55	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

#986	**14-04-2142-10-A**	**04/29/14 07:25**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 00:49**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	860	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#986	**14-04-2142-10-A**	**04/29/14 07:25**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 14:23**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	13000	5100	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#987	**14-04-2142-11-A**	**04/29/14 07:27**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 01:07**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#987	**14-04-2142-11-A**	**04/29/14 07:27**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 14:41**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	2400	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
802-IV-O-SS-005	**14-04-2142-12-A**	**04/29/14 13:30**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 01:25**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

750-I-O-SS-001	**14-04-2142-13-A**	**04/29/14 13:41**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 01:43**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	360	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
750-I-O-SS-001	**14-04-2142-13-A**	**04/29/14 13:41**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 14:59**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	2100	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
750-I-O-SS-002	**14-04-2142-14-A**	**04/29/14 13:48**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 02:01**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	64	50	1.00	
Aroclor-1254	92	50	1.00	
Aroclor-1260	70	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
750-I-O-SS-003	**14-04-2142-15-A**	**04/29/14 13:49**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 02:19**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	130	50	1.00	
Aroclor-1260	150	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
750-I-O-SS-004	**14-04-2142-16-A**	**04/29/14 13:54**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 02:37**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
750-I-O-SS-005	**14-04-2142-17-A**	**04/29/14 13:56**	**Solid**	**GC 58**	**04/29/14**	**05/01/14 02:55**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	120	50	1.00	
Aroclor-1254	130	50	1.00	
Aroclor-1260	50	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	137	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

Method Blank	**099-02-003-241**	**N/A**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 20:56**	**140429L08**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1526-111	**Sample**	**Solid**	**ICP 7300**	**04/29/14**	**04/30/14 11:57**	**140429S02**
14-04-1526-111	**Matrix Spike**	**Solid**	**ICP 7300**	**04/29/14**	**04/30/14 11:58**	**140429S02**
14-04-1526-111	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**04/29/14**	**04/30/14 11:59**	**140429S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	8.397	34	8.415	34	80-120	0	0-20	3
Arsenic	3.106	25.00	28.18	100	29.00	104	80-120	3	0-20	
Barium	76.50	25.00	107.7	125	101.1	98	80-120	6	0-20	3
Beryllium	ND	25.00	25.53	102	26.56	106	80-120	4	0-20	
Cadmium	ND	25.00	24.51	98	25.48	102	80-120	4	0-20	
Chromium	17.37	25.00	43.19	103	43.56	105	80-120	1	0-20	
Cobalt	7.878	25.00	33.40	102	34.99	108	80-120	5	0-20	
Copper	12.58	25.00	38.44	103	38.67	104	80-120	1	0-20	
Lead	5.757	25.00	29.54	95	32.30	106	80-120	9	0-20	
Molybdenum	ND	25.00	23.20	93	24.64	99	80-120	6	0-20	
Nickel	7.838	25.00	31.99	97	33.83	104	80-120	6	0-20	
Selenium	ND	25.00	20.92	84	22.20	89	80-120	6	0-20	
Silver	ND	12.50	11.75	94	11.55	92	80-120	2	0-20	
Thallium	ND	25.00	20.55	82	22.18	89	80-120	8	0-20	
Vanadium	37.88	25.00	66.95	116	65.92	112	80-120	2	0-20	
Zinc	40.79	25.00	67.38	106	68.81	112	80-120	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-2138-11	**Sample**	**Solid**	**Mercury 05**	**04/30/14**	**04/30/14 11:36**	**140430S01**
14-04-2138-11	**Matrix Spike**	**Solid**	**Mercury 05**	**04/30/14**	**04/30/14 11:38**	**140430S01**
14-04-2138-11	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**04/30/14**	**04/30/14 11:45**	**140430S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7319	88	0.6898	83	71-137	6	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1002	**Sample**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 23:20**	**140429S08**
#1002	**Matrix Spike**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 21:14**	**140429S08**
#1002	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 21:32**	**140429S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	113.6	114	110.6	111	50-135	3	0-25	
Aroclor-1260	ND	100.0	109.0	109	99.70	100	50-135	9	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-04-1526-111	**Sample**	**Solid**	**ICP 7300**	**04/29/14 00:00**	**04/30/14 11:57**	**140429S02**
14-04-1526-111	**PDS**	**Solid**	**ICP 7300**	**04/29/14 00:00**	**04/30/14 12:01**	**140429S02**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Antimony	ND	25.00	23.60	94	75-125	
Arsenic	3.106	25.00	28.73	103	75-125	
Barium	76.50	25.00	100.0	94	75-125	
Beryllium	ND	25.00	26.33	105	75-125	
Cadmium	ND	25.00	25.35	101	75-125	
Chromium	17.37	25.00	42.50	101	75-125	
Cobalt	7.878	25.00	33.90	104	75-125	
Copper	12.58	25.00	38.47	104	75-125	
Lead	5.757	25.00	30.49	99	75-125	
Molybdenum	ND	25.00	25.49	102	75-125	
Nickel	7.838	25.00	32.59	99	75-125	
Selenium	ND	25.00	23.17	93	75-125	
Silver	ND	12.50	12.21	98	75-125	
Thallium	ND	25.00	21.80	87	75-125	
Vanadium	37.88	25.00	62.47	98	75-125	
Zinc	40.79	25.00	67.00	105	75-125	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18332	**LCS**	**Solid**	**ICP 7300**	**04/29/14**	**04/29/14 19:39**	**140429L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	27.43	110	80-120	73-127	
Arsenic	25.00	25.42	102	80-120	73-127	
Barium	25.00	25.82	103	80-120	73-127	
Beryllium	25.00	26.09	104	80-120	73-127	
Cadmium	25.00	26.16	105	80-120	73-127	
Chromium	25.00	26.66	107	80-120	73-127	
Cobalt	25.00	27.72	111	80-120	73-127	
Copper	25.00	25.49	102	80-120	73-127	
Lead	25.00	26.83	107	80-120	73-127	
Molybdenum	25.00	26.60	106	80-120	73-127	
Nickel	25.00	27.17	109	80-120	73-127	
Selenium	25.00	21.84	87	80-120	73-127	
Silver	12.50	13.39	107	80-120	73-127	
Thallium	25.00	26.35	105	80-120	73-127	
Vanadium	25.00	26.17	105	80-120	73-127	
Zinc	25.00	25.33	101	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-199	**LCS**	**Solid**	**Mercury 05**	**04/30/14**	**04/30/14 11:22**	**140430L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7934	95	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	04/29/14
121 Innovation Drive, Suite 200		Work Order:	14-04-2142
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-241	**LCS**	**Solid**	**GC 58**	**04/29/14**	**04/30/14 20:38**	**140429L08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	96.72	97	50-135	
Aroclor-1260	100.0	99.62	100	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-04-2142

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8082	EPA 3540C	669	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-04-2142

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31322

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney

DATE: 4-29-14 PAGE 1 OF 2

PROJECT NUMBER: 01062310030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: **14-04-2142**

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO (NO circled)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	4-28-14	1500	#998	X	X	4 oz glass jar	S			X		1	
2		1502	#999	X	X		S			X		1	
3		1508	#1000	X			S			X		1	
4		1510	#1001	X			S			X		1	
5		1512	#1002	X			S			X		1	
6		1513	#1003	X			S			X		1	
7		1514	#1004	X			S			X		1	
8		1521	770-IIB-P/S-SS-003	X			S			X		1	
9		1527	772-IIB-P/S-SS-002	X			S			X		1	
10	4-29-14	0725	#986	X			S			X		1	
11		0727	#987	X			S			X		1	
12		1330	802-IV-0-SS-005	X			S			X		1	
13		1341	750-I-0-SS-001	X			S			X		1	
14		1348	750-I-0-SS-002	X			S			X		1	
15		1349	750-I-0-SS-003	X			S			X		1	

TOTAL NUMBER OF CONTAINERS: 15 (17)

SAMPLING COMMENTS:

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	4/29/14	1430	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/29/14	1430
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	4/29/14	1525	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CGI	4/29/14	1525
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CGI	4/29/14	1730	SIGNATURE: PRINTED NAME: Yan Liu COMPANY: CGI	4/29/14	1730

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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CHAIN-OF-CUSTODY RECORD

NB 31324

PROJECT NAME: Pechiney			DATE: 4-29-14 PAGE 2 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS: 2142
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Hchominsky

ANALYSES: EPA 8082

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONS COMMENTS
16	4-29-14	1354	750-I-0-SS-004	X	4 oz glass jar	S			X		1	
17	↓	1356	750-I-0-SS-005	X	↓	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Hchominsky PRINTED NAME: Kimberly Hchominsky COMPANY: AMEC	4/29/14	1430	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	4/29/14	1430
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	4/29/14	1525	SIGNATURE: Huang PRINTED NAME: Steve Marquez COMPANY: CR	4/29/14	1525
SIGNATURE: Huang PRINTED NAME: Steve Marquez COMPANY: CR	4/29/14	1730	SIGNATURE: PRINTED NAME: Yan Liao COMPANY: CR	4/29/14	1730

TOTAL NUMBER OF CONTAINERS: 2/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-04-2142

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 04/29/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.1 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: [illegible]

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 802

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 603

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 603

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Supplemental Report 1

The original report has been revised/corrected.

WORK ORDER NUMBER: 14-05-0076

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/16/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-05-0076

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Work Order Narrative

Work Order: 14-05-0076 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/01/14. They were assigned to Work Order 14-05-0076.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-0076
		Project Name:	Pechiney / 106270030
		PO Number:	
		Date/Time Received:	05/01/14 17:11
		Number of Containers:	16
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
809-IV-P/S-CS-001	14-05-0076-1	05/01/14 07:55	1	Other
809-IV-P/S-CS-002	14-05-0076-2	05/01/14 08:02	1	Other
809-IV-P/S-O-001	14-05-0076-3	05/01/14 08:05	1	Solid
811-IV-CS-CS-001	14-05-0076-4	05/01/14 08:15	1	Other
811-IV-CS-CS-002	14-05-0076-5	05/01/14 08:20	1	Other
820-IV-CS-CS-001	14-05-0076-6	05/01/14 08:37	1	Other
821-IV-CS-CS-001	14-05-0076-7	05/01/14 08:40	1	Other
815-IV-CS-CS-001	14-05-0076-8	05/01/14 08:54	1	Other
815-IV-CS-O-001	14-05-0076-9	05/01/14 08:56	1	Solid
819-IV-P/S-CS-001	14-05-0076-10	05/01/14 09:02	1	Other
821-IV-CS-SS-001	14-05-0076-11	05/01/14 09:10	1	Other
820-IV-CS-SS-001	14-05-0076-12	05/01/14 09:10	1	Solid
293-IV-P/S-O-001	14-05-0076-13	05/01/14 10:11	4	Aqueous

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-05-0076 Pechiney / 106270030 05/01/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
820-IV-CS-CS-001 (14-05-0076-6)						
Aroclor-1248	97		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	84		50	ug/kg	EPA 8082	EPA 3540C
821-IV-CS-CS-001 (14-05-0076-7)						
Aroclor-1248	69		50	ug/kg	EPA 8082	EPA 3540C
815-IV-CS-CS-001 (14-05-0076-8)						
Aroclor-1248	51		50	ug/kg	EPA 8082	EPA 3540C
820-IV-CS-SS-001 (14-05-0076-12)						
Aroclor-1248	190		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	61		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-O-001 (14-05-0076-13)						
Barium	0.0264		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Molybdenum	0.0105		0.0100	mg/L	EPA 6010B	EPA 3010A Total
Zinc	0.0311		0.0100	mg/L	EPA 6010B	EPA 3010A Total

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-001	**14-05-0076-13-E**	**05/01/14 10:11**	**Aqueous**	**GC 48**	**05/02/14**	**05/02/14 14:10**	**140502B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1.00	
C7	ND	100	1.00	
C8	ND	100	1.00	
C9-C10	ND	100	1.00	
C11-C12	ND	100	1.00	
C13-C14	ND	100	1.00	
C15-C16	ND	100	1.00	
C17-C18	ND	100	1.00	
C19-C20	ND	100	1.00	
C21-C22	ND	100	1.00	
C23-C24	ND	100	1.00	
C25-C28	ND	100	1.00	
C29-C32	ND	100	1.00	
C33-C36	ND	100	1.00	
C37-C40	ND	100	1.00	
C41-C44	ND	100	1.00	
C6-C44 Total	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	92	68-140	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-498-161**	**N/A**	**Aqueous**	**GC 48**	**05/02/14**	**05/02/14 13:23**	**140502B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	100	1.00	
C7	ND	100	1.00	
C8	ND	100	1.00	
C9-C10	ND	100	1.00	
C11-C12	ND	100	1.00	
C13-C14	ND	100	1.00	
C15-C16	ND	100	1.00	
C17-C18	ND	100	1.00	
C19-C20	ND	100	1.00	
C21-C22	ND	100	1.00	
C23-C24	ND	100	1.00	
C25-C28	ND	100	1.00	
C29-C32	ND	100	1.00	
C33-C36	ND	100	1.00	
C37-C40	ND	100	1.00	
C41-C44	ND	100	1.00	
C6-C44 Total	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	68-140	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Pechiney / 106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-001	**14-05-0076-13-D**	**05/01/14 10:11**	**Aqueous**	**ICP 7300**	**05/01/14**	**05/02/14 15:45**	**140501LA7**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1.00	
Arsenic	ND	0.0100	1.00	
Barium	0.0264	0.0100	1.00	
Beryllium	ND	0.0100	1.00	
Cadmium	ND	0.0100	1.00	
Chromium	ND	0.0100	1.00	
Cobalt	ND	0.0100	1.00	
Copper	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	
Molybdenum	0.0105	0.0100	1.00	
Nickel	ND	0.0100	1.00	
Selenium	ND	0.0150	1.00	
Silver	ND	0.00500	1.00	
Thallium	ND	0.0150	1.00	
Vanadium	ND	0.0100	1.00	
Zinc	0.0311	0.0100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Pechiney / 106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-003-14210**	**N/A**	**Aqueous**	**ICP 7300**	**05/01/14**	**05/02/14 15:40**	**140501LA7**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.0150	1.00	
Arsenic	ND	0.0100	1.00	
Barium	ND	0.0100	1.00	
Beryllium	ND	0.0100	1.00	
Cadmium	ND	0.0100	1.00	
Chromium	ND	0.0100	1.00	
Cobalt	ND	0.0100	1.00	
Copper	ND	0.0100	1.00	
Lead	ND	0.0100	1.00	
Molybdenum	ND	0.0100	1.00	
Nickel	ND	0.0100	1.00	
Selenium	ND	0.0150	1.00	
Silver	ND	0.00500	1.00	
Thallium	ND	0.0150	1.00	
Vanadium	ND	0.0100	1.00	
Zinc	ND	0.0100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
		Units:	mg/L
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-001	**14-05-0076-13-D**	**05/01/14 10:11**	**Aqueous**	**Mercury 04**	**05/01/14**	**05/02/14 12:54**	**140501L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1.00	

Method Blank	**099-04-008-6952**	**N/A**	**Aqueous**	**Mercury 04**	**05/01/14**	**05/01/14 17:52**	**140501L03**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.000500	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
809-IV-P/S-CS-001	**14-05-0076-1-A**	**05/01/14 07:55**	**Other**	**GC 31**	**05/01/14**	**05/02/14 23:32**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	123	50-130	

809-IV-P/S-CS-002	**14-05-0076-2-A**	**05/01/14 08:02**	**Other**	**GC 31**	**05/01/14**	**05/03/14 11:33**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
809-IV-P/S-O-001	**14-05-0076-3-A**	**05/01/14 08:05**	**Solid**	**GC 31**	**05/01/14**	**05/03/14 11:53**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

811-IV-CS-CS-001	**14-05-0076-4-A**	**05/01/14 08:15**	**Other**	**GC 31**	**05/01/14**	**05/03/14 00:29**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
811-IV-CS-CS-002	**14-05-0076-5-A**	**05/01/14 08:20**	**Other**	**GC 31**	**05/01/14**	**05/03/14 00:48**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

820-IV-CS-CS-001	**14-05-0076-6-A**	**05/01/14 08:37**	**Other**	**GC 31**	**05/01/14**	**05/03/14 01:07**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	97	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	84	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	140	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
821-IV-CS-CS-001	**14-05-0076-7-A**	**05/01/14 08:40**	**Other**	**GC 31**	**05/01/14**	**05/03/14 13:28**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	69	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	139	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

815-IV-CS-CS-001	**14-05-0076-8-A**	**05/01/14 08:54**	**Other**	**GC 31**	**05/01/14**	**05/03/14 01:45**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	51	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
815-IV-CS-O-001	**14-05-0076-9-A**	**05/01/14 08:56**	**Solid**	**GC 31**	**05/01/14**	**05/05/14 15:39**	**140501L16**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	510	10.0	
Aroclor-1221	ND	510	10.0	
Aroclor-1232	ND	510	10.0	
Aroclor-1242	ND	510	10.0	
Aroclor-1248	ND	510	10.0	
Aroclor-1254	ND	510	10.0	
Aroclor-1260	ND	510	10.0	
Aroclor-1262	ND	510	10.0	
Aroclor-1268	ND	510	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	240	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

819-IV-P/S-CS-001	**14-05-0076-10-A**	**05/01/14 09:02**	**Other**	**GC 31**	**05/01/14**	**05/05/14 16:17**	**140501L16**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	100	2.00	
Aroclor-1221	ND	100	2.00	
Aroclor-1232	ND	100	2.00	
Aroclor-1242	ND	100	2.00	
Aroclor-1248	ND	100	2.00	
Aroclor-1254	ND	100	2.00	
Aroclor-1260	ND	100	2.00	
Aroclor-1262	ND	100	2.00	
Aroclor-1268	ND	100	2.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	60	60-125	
2,4,5,6-Tetrachloro-m-Xylene	65	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
821-IV-CS-SS-001	**14-05-0076-11-A**	**05/01/14 09:10**	**Other**	**GC 31**	**05/01/14**	**05/03/14 02:24**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

820-IV-CS-SS-001	**14-05-0076-12-A**	**05/01/14 09:10**	**Solid**	**GC 31**	**05/01/14**	**05/03/14 12:12**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	190	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	61	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	170	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-243**	**N/A**	**Solid**	**GC 31**	**05/01/14**	**05/02/14 22:54**	**140501L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	121	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
		Units:	ug/L
Project: Pechiney / 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-001	**14-05-0076-13-E**	**05/01/14 10:11**	**Aqueous**	**GC 31**	**05/01/14**	**05/02/14 18:07**	**140501L11A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	0.99	1.00	
Aroclor-1221	ND	0.99	1.00	
Aroclor-1232	ND	0.99	1.00	
Aroclor-1242	ND	0.99	1.00	
Aroclor-1248	ND	0.99	1.00	
Aroclor-1254	ND	0.99	1.00	
Aroclor-1260	ND	0.99	1.00	
Aroclor-1262	ND	0.99	1.00	
Aroclor-1268	ND	0.99	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	50-135	
2,4,5,6-Tetrachloro-m-Xylene	102	50-135	

Method Blank	**099-12-640-25**	**N/A**	**Aqueous**	**GC 31**	**05/01/14**	**05/01/14 21:46**	**140501L11A**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1.0	1.00	
Aroclor-1221	ND	1.0	1.00	
Aroclor-1232	ND	1.0	1.00	
Aroclor-1242	ND	1.0	1.00	
Aroclor-1248	ND	1.0	1.00	
Aroclor-1254	ND	1.0	1.00	
Aroclor-1260	ND	1.0	1.00	
Aroclor-1262	ND	1.0	1.00	
Aroclor-1268	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	50-135	
2,4,5,6-Tetrachloro-m-Xylene	105	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Pechiney / 106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-001	**14-05-0076-13-A**	**05/01/14 10:11**	**Aqueous**	**GC/MS T**	**05/01/14**	**05/02/14 02:13**	**140501L029**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Pechiney / 106270030			Page 2 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	80-120	
Dibromofluoromethane	99	78-126	
1,2-Dichloroethane-d4	99	75-135	
Toluene-d8	93	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Pechiney / 106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-13918**	**N/A**	**Aqueous**	**GC/MS T**	**05/01/14**	**05/01/14 18:38**	**140501L029**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: Pechiney / 106270030			Page 4 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	80-120	
Dibromofluoromethane	96	78-126	
1,2-Dichloroethane-d4	94	75-135	
Toluene-d8	91	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
293-IV-P/S-O-001	**Sample**	**Aqueous**	**ICP 7300**	**05/01/14**	**05/02/14 15:45**	**140501SA7**
293-IV-P/S-O-001	**Matrix Spike**	**Aqueous**	**ICP 7300**	**05/01/14**	**05/02/14 15:47**	**140501SA7**
293-IV-P/S-O-001	**Matrix Spike Duplicate**	**Aqueous**	**ICP 7300**	**05/01/14**	**05/02/14 15:49**	**140501SA7**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	0.5000	0.4741	95	0.4959	99	72-132	4	0-10	
Arsenic	ND	0.5000	0.4988	100	0.5139	103	80-140	3	0-11	
Barium	0.02637	0.5000	0.5398	103	0.5609	107	87-123	4	0-6	
Beryllium	ND	0.5000	0.5622	112	0.5687	114	89-119	1	0-8	
Cadmium	ND	0.5000	0.5423	108	0.5525	110	82-124	2	0-7	
Chromium	ND	0.5000	0.5351	107	0.5491	110	86-122	3	0-8	
Cobalt	ND	0.5000	0.5701	114	0.5817	116	83-125	2	0-7	
Copper	ND	0.5000	0.5386	108	0.5512	110	78-126	2	0-7	
Lead	ND	0.5000	0.5434	109	0.5573	111	84-120	3	0-7	
Molybdenum	0.01054	0.5000	0.5366	105	0.5514	108	78-126	3	0-7	
Nickel	ND	0.5000	0.5457	109	0.5608	112	84-120	3	0-7	
Selenium	ND	0.5000	0.5360	107	0.5455	109	79-127	2	0-9	
Silver	ND	0.2500	0.2669	107	0.2785	111	86-128	4	0-7	
Thallium	ND	0.5000	0.5490	110	0.5609	112	79-121	2	0-8	
Vanadium	ND	0.5000	0.5360	107	0.5493	110	88-118	2	0-7	
Zinc	0.03106	0.5000	0.5627	106	0.5722	108	89-131	2	0-8	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 7470A Filt.
		Method:	EPA 7470A
Project: Pechiney / 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-2169-2	**Sample**	**Aqueous**	**Mercury 04**	**05/01/14**	**05/01/14 18:01**	**140501S03**
14-04-2169-2	**Matrix Spike**	**Aqueous**	**Mercury 04**	**05/01/14**	**05/01/14 17:56**	**140501S03**
14-04-2169-2	**Matrix Spike Duplicate**	**Aqueous**	**Mercury 04**	**05/01/14**	**05/01/14 17:58**	**140501S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.01000	0.008037	80	0.008074	81	57-141	0	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
821-IV-CS-SS-001	**Sample**	**Other**	**GC 31**	**05/01/14**	**05/03/14 02:24**	**140501S16**
821-IV-CS-SS-001	**Matrix Spike**	**Other**	**GC 31**	**05/01/14**	**05/03/14 03:02**	**140501S16**
821-IV-CS-SS-001	**Matrix Spike Duplicate**	**Other**	**GC 31**	**05/01/14**	**05/03/14 03:21**	**140501S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	106.8	107	93.06	93	50-135	14	0-25	
Aroclor-1260	ND	100.0	121.2	121	113.5	113	50-135	7	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-04-1926-1	**Sample**	**Aqueous**	**GC/MS T**	**05/01/14**	**05/01/14 19:15**	**140501S015**
14-04-1926-1	**Matrix Spike**	**Aqueous**	**GC/MS T**	**05/01/14**	**05/01/14 19:43**	**140501S015**
14-04-1926-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS T**	**05/01/14**	**05/01/14 20:11**	**140501S015**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	40.66	81	40.48	81	78-120	0	0-9	
Chloroform	ND	50.00	46.98	94	47.23	94	80-120	1	0-10	
1,1-Dichloroethane	ND	50.00	45.04	90	45.10	90	80-120	0	0-10	
1,2-Dichloroethane	ND	50.00	48.00	96	46.59	93	76-130	3	0-11	
1,1-Dichloroethene	ND	50.00	48.45	97	49.47	99	70-130	2	0-15	
Tetrachloroethene	ND	50.00	43.91	88	43.77	88	80-120	0	0-9	
Toluene	ND	50.00	43.90	88	43.54	87	72-126	1	0-10	
Trichloroethene	ND	50.00	43.55	87	44.02	88	74-122	1	0-10	
p/m-Xylene	ND	100.0	103.4	103	103.1	103	70-130	0	0-30	
o-Xylene	ND	50.00	53.05	106	53.44	107	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	46.79	94	46.73	93	69-123	0	0-17	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
Project: Pechiney / 106270030			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-498-161	**LCS**	**Aqueous**	**GC 48**	**05/02/14**	**05/02/14 13:39**	**140502B01**
099-15-498-161	**LCSD**	**Aqueous**	**GC 48**	**05/02/14**	**05/02/14 13:55**	**140502B01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	4000	3962	99	3907	98	75-117	1	0-13	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
Project: Pechiney / 106270030			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-003-14210	**LCS**	**Aqueous**	**ICP 7300**	**05/01/14**	**05/02/14 15:44**	**140501LA7**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	0.5000	0.5126	103	80-120	73-127	
Arsenic	0.5000	0.5173	103	80-120	73-127	
Barium	0.5000	0.5175	104	80-120	73-127	
Beryllium	0.5000	0.5068	101	80-120	73-127	
Cadmium	0.5000	0.5281	106	80-120	73-127	
Chromium	0.5000	0.5305	106	80-120	73-127	
Cobalt	0.5000	0.5723	114	80-120	73-127	
Copper	0.5000	0.5154	103	80-120	73-127	
Lead	0.5000	0.5420	108	80-120	73-127	
Molybdenum	0.5000	0.5132	103	80-120	73-127	
Nickel	0.5000	0.5488	110	80-120	73-127	
Selenium	0.5000	0.4915	98	80-120	73-127	
Silver	0.2500	0.2590	104	80-120	73-127	
Thallium	0.5000	0.5385	108	80-120	73-127	
Vanadium	0.5000	0.5076	102	80-120	73-127	
Zinc	0.5000	0.5233	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 7470A Total
		Method:	EPA 7470A
Project: Pechiney / 106270030			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-04-008-6952	**LCS**	**Aqueous**	**Mercury 04**	**05/01/14**	**05/01/14 17:54**	**140501L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.01000	0.008841	88	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-243	**LCS**	**Solid**	**GC 31**	**05/01/14**	**05/02/14 22:35**	**140501L16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	103.3	103	50-135	
Aroclor-1260	100.0	102.4	102	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 3510C
		Method:	EPA 8082
Project: Pechiney / 106270030			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-640-25	**LCS**	**Aqueous**	**GC 31**	**05/01/14**	**05/01/14 21:08**	**140501L11A**
099-12-640-25	**LCSD**	**Aqueous**	**GC 31**	**05/01/14**	**05/01/14 21:27**	**140501L11A**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	2.000	2.358	118	2.451	123	50-135	4	0-25	
Aroclor-1260	2.000	2.410	120	2.575	129	50-135	7	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/01/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0076
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 106270030			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-001-13918	**LCS**	**Aqueous**	**GC/MS T**	**05/01/14**	**05/01/14 17:32**	**140501L029**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	50.77	102	80-120	73-127	
Carbon Tetrachloride	50.00	54.52	109	67-139	55-151	
Chlorobenzene	50.00	52.89	106	78-120	71-127	
1,2-Dibromoethane	50.00	54.58	109	80-120	73-127	
1,2-Dichlorobenzene	50.00	53.81	108	63-129	52-140	
1,2-Dichloroethane	50.00	54.91	110	70-130	60-140	
1,1-Dichloroethene	50.00	52.63	105	66-126	56-136	
Ethylbenzene	50.00	53.83	108	80-123	73-130	
Toluene	50.00	47.03	94	80-120	73-127	
Trichloroethene	50.00	48.43	97	80-122	73-129	
Vinyl Chloride	50.00	51.82	104	70-130	60-140	
p/m-Xylene	100.0	108.9	109	75-123	67-131	
o-Xylene	50.00	55.16	110	74-122	66-130	
Methyl-t-Butyl Ether (MTBE)	50.00	48.52	97	69-129	59-139	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-05-0076

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3010A Total	469	ICP 7300	1
EPA 7470A	EPA 7470A Total	769	Mercury 04	1
EPA 8015B (M)	EPA 3510C	847	GC 48	1
EPA 8082	EPA 3510C	669	GC 31	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	849	GC/MS T	2

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Glossary of Terms and Qualifiers

Work Order: 14-05-0076 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Lee, Zhur [zhur.lee@amec.com]
Sent: Thursday, June 12, 2014 3:34 PM
To: Stephen Nowak
Cc: Costamagna, Daniel G
Subject: Revisions to multiple work orders for Pechiney

Stephen,

Below is a list of lab reports for the Pechiney project and the Sample IDs that should be revised.

Lab Report #	Sample ID # (as it appears on lab report)	Should Be Revised To
13-11-1038	221-I-P/S-CS-001	221-I-P/S-SS-001
13-11-1426	132-IIA-P/S-CS013	132-IIA-P/S-CS-013
	132-IIA-P/S-CS014	132-IIA-P/S-CS-014
13-11-1505	549-6	#549-6
	550-6	#550-6
	551-6	#551-6
14-01-1158	DC-382	DC-382-1
14-01-1160	DC378	DC-378
	DC379	DC-379
	DC380	DC-380
14-01-1574	DC-382	DC-382-2
14-03-0469_s1	605-11A-P/S-O-001	605-IIA-P/S-O-001
14-03-0682	575-IIA-P/S-CS-001	575-IV-P/S-CS-001*
14-05-0076	821-IV-C/S-SS-001	821-IV-CS-SS-001
	820-IV-C/S-SS-001	820-IV-CS-SS-001
13-10-1733	0142-1-P/S-SS-001	0142-I-P/S-SS-001
	0142-1-P/S-SS-002	0142-I-P/S-SS-002
	0142-1-P/S-SS-003	0142-I-P/S-SS-003
	0142-1-P/S-SS-004	0142-I-P/S-SS-004
	103-1-P-SS-001	103-I-P-SS-001
	103-1-P-SS-002	103-I-P-SS-002
	103-1-P-SS-003	103-I-P-SS-003
	60-1-PP-0-002	60-I-PP-O-002
13-12-0393	301-11A-F/F-SS-001	301-IIA-F/F-SS-001
13-11-0580	167-I-P/S-S-003	167-I-P/S-SS-003

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13-11-0580_s1	167-I-P/S-S-003	167-I-P/S-SS-003

Please provide revised reports once the updates have been made. Let me know if you have any questions, thank you.

Zhur Lee
Project Coordinator
AMEC
Environment & Infrastructure
121 Innovation Drive, Suite 200, Irvine, CA 92617
Tel 949-642-0245 x1591, Fax 949-642-4474
zhur.lee@amec.com

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NB 31326

CHAIN-OF-CUSTODY RECORD

DATE: 5/1/14 PAGE 1 OF 1

PROJECT NAME: Pechiney

PROJECT NUMBER: 106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 Hrs

SAMPLE SHIPMENT METHOD: Pick-up - CAS

LABORATORY NAME: CAC Sciences

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-05-0076

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8032	EPA 8015	Title 22 Metals	EPA 8260	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5/1/14	0755	809-IV-P/S-CS-001	/				4 oz Glass Jar	O					1	
2		0802	809-IV-P/S-CS-002	/					O					1	
3		0805	809-IV-P/S-O-001	/					S					1	
4		0815	811-IV-CS-CS-001	/					O					1	
5		0820	811-IV-CS-CS-002	/					O					1	
6		0837	820-IV-CS-CS-001	/					O					1	
7		0840	821-IV-CS-CS-001	/					O					1	
8		0854	815-IV-CS-CS-001	/					O					1	
9		0856	815-IV-CS-O-001	/					S					1	
10		0902	819-IV-P/S-CS-001	/					O					1	
11		0910	821-IV-C/S-SS-001	/					O					1	
12		0910	820-IV-C/S-SS-001	/					S					1	
13		1011	293-IV-P/S-O-001	X	X	X	X	See comments	W					6	
								~~See comments~~	W					~~6~~	Kshc

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	5/1/14	1400	SIGNATURE: PRINTED NAME: Zhenzhong COMPANY: AMEC	5/1/14	1400
SIGNATURE: PRINTED NAME: Zhenzhong COMPANY: AMEC	5/1/14	1530	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEL	5/1/14	1530
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEL	5/1/14	1711	SIGNATURE: PRINTED NAME: Yan Liao COMPANY: CEL	5/1/14	1711

TOTAL NUMBER OF CONTAINERS: 18

SAMPLING COMMENTS: 2 - liter amber, 3 - 40mL VOAs w/ HCl, 8 oz poly w/ HNO_3

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-0076

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/1/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 876

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☐	☑	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☑VOA**h** (3) ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB (2) ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 876

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 802

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-0076

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Sample(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☑ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☑ **Broken**
- ☐ **Sample container(s) not labeled**
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

(-13) 1 of 2 1 liter amber glass container received broken (frozen).
(-13) 1 of 3 vials received broken (frozen).

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: 826 05/01/14

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-0362

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/08/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Pechiney / 0106270030
Work Order Number: 14-05-0362

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-0362 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/06/14. They were assigned to Work Order 14-05-0362.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-0362
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	05/06/14 13:20
		Number of Containers:	14
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1016	14-05-0362-1	05/05/14 10:20	1	Solid
750-I-O-SS-006	14-05-0362-2	05/05/14 10:49	1	Solid
750-I-O-SS-007	14-05-0362-3	05/05/14 10:55	1	Solid
750-I-O-SS-008	14-05-0362-4	05/05/14 11:03	1	Solid
750-I-O-SS-009	14-05-0362-5	05/05/14 11:10	1	Solid
760-IIB-P/S-SS-002	14-05-0362-6	05/05/14 11:32	1	Solid
760-IIB-P/S-SS-003	14-05-0362-7	05/05/14 11:34	1	Solid
760-IIB-P/S-SS-004	14-05-0362-8	05/05/14 11:36	1	Solid
760-IIB-P/S-SS-005	14-05-0362-9	05/05/14 11:38	1	Solid
760-IIB-P/S-SS-006	14-05-0362-10	05/05/14 11:40	1	Solid
768-IIB-CS-SS-002	14-05-0362-11	05/05/14 13:46	1	Solid
777-IV-P/S-SS-001	14-05-0362-12	05/05/14 14:55	1	Solid
827-IV-P/S-O-001	14-05-0362-13	05/05/14 14:57	1	Solid
694-IIB-P/S-SS-001	14-05-0362-14	05/05/14 15:34	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-0362
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/06/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1016 (14-05-0362-1)						
Arsenic	1.74		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	36.1		0.510	mg/kg	EPA 6010B	EPA 3050B
Chromium	24.9		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	3.17		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	8.69		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	4.68		0.510	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.944		0.255	mg/kg	EPA 6010B	EPA 3050B
Nickel	31.8		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	47.3		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	161		1.02	mg/kg	EPA 6010B	EPA 3050B
750-I-O-SS-006 (14-05-0362-2)						
Aroclor-1248	340		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	140		50	ug/kg	EPA 8082	EPA 3540C
760-IIB-P/S-SS-004 (14-05-0362-8)						
Aroclor-1248	120		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	82		50	ug/kg	EPA 8082	EPA 3540C
760-IIB-P/S-SS-006 (14-05-0362-10)						
Aroclor-1254	52		50	ug/kg	EPA 8082	EPA 3540C
768-IIB-CS-SS-002 (14-05-0362-11)						
Aroclor-1248	3400		490	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	240		49	ug/kg	EPA 8082	EPA 3540C
777-IV-P/S-SS-001 (14-05-0362-12)						
Aroclor-1248	97		51	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	59		51	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1016	**14-05-0362-1-A**	**05/05/14 10:20**	**Solid**	**ICP 7300**	**05/06/14**	**05/06/14 20:38**	**140506L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	1.74	0.765	1.02	
Barium	36.1	0.510	1.02	
Beryllium	ND	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	24.9	0.255	1.02	
Cobalt	3.17	0.255	1.02	
Copper	8.69	0.510	1.02	
Lead	4.68	0.510	1.02	
Molybdenum	0.944	0.255	1.02	
Nickel	31.8	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	47.3	0.255	1.02	
Zinc	161	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18345**	**N/A**	**Solid**	**ICP 7300**	**05/06/14**	**05/06/14 18:20**	**140506L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1016	**14-05-0362-1-A**	**05/05/14 10:20**	**Solid**	**Mercury 05**	**05/06/14**	**05/07/14 12:31**	**140506L08**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Method Blank	**099-16-272-207**	**N/A**	**Solid**	**Mercury 05**	**05/06/14**	**05/07/14 12:17**	**140506L08**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1016	**14-05-0362-1-A**	**05/05/14 10:20**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 21:12**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

750-I-O-SS-006	**14-05-0362-2-A**	**05/05/14 10:49**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 21:30**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	340	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	140	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
750-I-O-SS-007	**14-05-0362-3-A**	**05/05/14 10:55**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 21:48**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

750-I-O-SS-008	**14-05-0362-4-A**	**05/05/14 11:03**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 22:06**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
750-I-O-SS-009	**14-05-0362-5-A**	**05/05/14 11:10**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 22:24**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

760-IIB-P/S-SS-002	**14-05-0362-6-A**	**05/05/14 11:32**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 22:42**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	75	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
760-IIB-P/S-SS-003	**14-05-0362-7-A**	**05/05/14 11:34**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 23:00**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

760-IIB-P/S-SS-004	**14-05-0362-8-A**	**05/05/14 11:36**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 23:18**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	120	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	82	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	60-125	
2,4,5,6-Tetrachloro-m-Xylene	82	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
760-IIB-P/S-SS-005	**14-05-0362-9-A**	**05/05/14 11:38**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 23:36**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1248	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	ND	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	137	50-130	2,7

760-IIB-P/S-SS-006	**14-05-0362-10-A**	**05/05/14 11:40**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 23:54**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	52	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	78	60-125	
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
768-IIB-CS-SS-002	**14-05-0362-11-A**	**05/05/14 13:46**	**Solid**	**GC 58**	**05/06/14**	**05/08/14 00:12**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	49	1.00	
Aroclor-1221	ND	49	1.00	
Aroclor-1232	ND	49	1.00	
Aroclor-1242	ND	49	1.00	
Aroclor-1254	ND	49	1.00	
Aroclor-1260	240	49	1.00	
Aroclor-1262	ND	49	1.00	
Aroclor-1268	ND	49	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

768-IIB-CS-SS-002	**14-05-0362-11-A**	**05/05/14 13:46**	**Solid**	**GC 58**	**05/06/14**	**05/08/14 11:14**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3400	490	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
777-IV-P/S-SS-001	**14-05-0362-12-A**	**05/05/14 14:55**	**Solid**	**GC 58**	**05/06/14**	**05/08/14 00:30**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	97	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	59	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

827-IV-P/S-O-001	**14-05-0362-13-A**	**05/05/14 14:57**	**Solid**	**GC 58**	**05/06/14**	**05/08/14 00:48**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
694-IIB-P/S-SS-001	**14-05-0362-14-A**	**05/05/14 15:34**	**Solid**	**GC 58**	**05/06/14**	**05/08/14 01:24**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

Method Blank	**099-02-003-244**	**N/A**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 20:18**	**140506L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0315-1	**Sample**	**Solid**	**ICP 7300**	**05/06/14**	**05/06/14 18:22**	**140506S01**
14-05-0315-1	**Matrix Spike**	**Solid**	**ICP 7300**	**05/06/14**	**05/06/14 18:24**	**140506S01**
14-05-0315-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/06/14**	**05/06/14 18:25**	**140506S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	11.02	44	10.44	42	50-115	5	0-20	3
Arsenic	1.431	25.00	24.50	92	26.54	100	75-125	8	0-20	
Barium	45.58	25.00	65.63	80	69.51	96	75-125	6	0-20	
Beryllium	ND	25.00	24.48	98	26.08	104	75-125	6	0-20	
Cadmium	ND	25.00	23.99	96	25.49	102	75-125	6	0-20	
Chromium	8.737	25.00	32.26	94	34.84	104	75-125	8	0-20	
Cobalt	3.654	25.00	28.08	98	29.95	105	75-125	6	0-20	
Copper	3.761	25.00	27.54	95	29.90	105	75-125	8	0-20	
Lead	2.100	25.00	25.79	95	27.42	101	75-125	6	0-20	
Molybdenum	0.2767	25.00	23.07	91	24.51	97	75-125	6	0-20	
Nickel	6.549	25.00	30.64	96	33.53	108	75-125	9	0-20	
Selenium	ND	25.00	20.91	84	22.30	89	75-125	6	0-20	
Silver	ND	12.50	11.89	95	12.63	101	75-125	6	0-20	
Thallium	ND	25.00	14.43	58	20.69	83	75-125	36	0-20	3,4
Vanadium	12.17	25.00	34.51	89	38.87	107	75-125	12	0-20	
Zinc	14.00	25.00	36.97	92	40.72	107	75-125	10	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0315-1	**Sample**	**Solid**	**Mercury 05**	**05/06/14**	**05/07/14 12:24**	**140506S08**
14-05-0315-1	**Matrix Spike**	**Solid**	**Mercury 05**	**05/06/14**	**05/07/14 12:26**	**140506S08**
14-05-0315-1	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**05/06/14**	**05/07/14 12:28**	**140506S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7182	86	0.6508	78	71-137	10	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
750-I-O-SS-009	**Sample**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 22:24**	**140506S11**
750-I-O-SS-009	**Matrix Spike**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 20:36**	**140506S11**
750-I-O-SS-009	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 20:54**	**140506S11**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	80.26	80	70.14	70	50-135	13	0-25	
Aroclor-1260	ND	100.0	67.88	68	68.78	69	50-135	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18345	**LCS**	**Solid**	**ICP 7300**	**05/06/14**	**05/06/14 18:21**	**140506L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	27.17	109	80-120	73-127	
Arsenic	25.00	25.29	101	80-120	73-127	
Barium	25.00	26.02	104	80-120	73-127	
Beryllium	25.00	25.58	102	80-120	73-127	
Cadmium	25.00	26.28	105	80-120	73-127	
Chromium	25.00	26.23	105	80-120	73-127	
Cobalt	25.00	28.15	113	80-120	73-127	
Copper	25.00	25.79	103	80-120	73-127	
Lead	25.00	26.62	106	80-120	73-127	
Molybdenum	25.00	26.05	104	80-120	73-127	
Nickel	25.00	27.50	110	80-120	73-127	
Selenium	25.00	22.73	91	80-120	73-127	
Silver	12.50	12.95	104	80-120	73-127	
Thallium	25.00	27.82	111	80-120	73-127	
Vanadium	25.00	25.12	100	80-120	73-127	
Zinc	25.00	26.29	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-272-207	**LCS**	**Solid**	**Mercury 05**	**05/06/14**	**05/07/14 12:20**	**140506L08**
099-16-272-207	**LCSD**	**Solid**	**Mercury 05**	**05/06/14**	**05/07/14 12:22**	**140506L08**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.8654	104	0.8706	104	85-121	1	0-10	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/06/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0362
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-244	**LCS**	**Solid**	**GC 58**	**05/06/14**	**05/07/14 20:01**	**140506L11**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	68.40	68	50-135	
Aroclor-1260	100.0	70.42	70	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-0362

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8082	EPA 3540C	669	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-0362 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31327

PROJECT NAME: Pechiney			DATE: 5-5-14 PAGE 1 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-05-0362
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Hchominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	THe 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-5-14	1020	#1016	X	X	4oz glass jar	S			X		1	
2		1049	750-I-0-SS-006	X			S			X		1	
3		1055	750-I-0-SS-007	X			S			X		1	
4		1103	750-I-0-SS-008	X			S			X		1	
5		1110	750-I-0-SS-009	X			S			X		1	
6		1132	760-IIB-P/S-SS-002	X			S			X		1	
7		1134	760-IIB-P/S-SS-003	X			S			X		1	
8		1136	760-IIB-P/S-SS-004	X			S			X		1	
9		1138	760-IIB-P/S-SS-005	X			S			X		1	
10		1140	760-IIB-P/S-SS-006	X			S			X		1	
11		1346	768-IIB-CS-SS-002	X			S			X		1	
12		1455	777-IV-P/S-SS-001	X			S			X		1	
13		1457	827-IV-P/S-0-001	X			S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Hchominsky PRINTED NAME: Kimberly HChominsky COMPANY: AMEC	5/5/14	1530	SIGNATURE: PRINTED NAME: Hoan Anh Thang COMPANY: AMEC	5/5/14	1530
SIGNATURE: PRINTED NAME: Hoan Anh Thang COMPANY: AMEC	5/6/14	1015	SIGNATURE: PRINTED NAME: Alan Peterson COMPANY: CEL	5/6/14	1015
SIGNATURE: PRINTED NAME: Alan Peterson COMPANY: CEL	5/06/14	1320	SIGNATURE: Dannyle PRINTED NAME: DANNY LE COMPANY: CEL	5/6/14	13:20

TOTAL NUMBER OF CONTAINERS: 13

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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NB 31328

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney
PROJECT NUMBER: 01062700030
RESULTS TO: Linda Conlan
TURNAROUND TIME: 48 HR
SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience
LABORATORY ADDRESS:
LABORATORY CONTACT: Steve Nowak
LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

DATE: 5-5-14 PAGE 2 OF 2
REPORTING REQUIREMENTS: 0362
GEOTRACKER REQUIRED YES NO
SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES: EPA 8082

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
14	5-5-14	1534	694-IIB-P/S-SS-001	X	4oz glass jar	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	5/5/14	1603	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	5/5/13	1603
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	5/6/14	1015	SIGNATURE: PRINTED NAME: Adam Rutrow COMPANY: CEC	5/6/14	1015
SIGNATURE: PRINTED NAME: Adam Rutrow COMPANY: CEC	5/06/14	1320	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CEC	5/6/14	13:20

TOTAL NUMBER OF CONTAINERS: 1

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-0362

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/06/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.4 °C - 0.3 °C (CF) = 3.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 802

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-0512

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/12/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-05-0512

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-0512 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/07/14. They were assigned to Work Order 14-05-0512.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-0512
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	05/07/14 17:41
		Number of Containers:	10
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1017	14-05-0512-1	05/07/14 11:41	1	Solid
849-IV-P/S-O-001	14-05-0512-2	05/07/14 12:51	1	Solid
849-IV-P/S-O-002	14-05-0512-3	05/07/14 12:52	1	Solid
809-IV-P/S-O-002	14-05-0512-4	05/07/14 13:02	1	Solid
815-IV-CS-SS-001	14-05-0512-5	05/07/14 13:06	1	Solid
799-IV-CS-SS-001	14-05-0512-6	05/07/14 13:18	1	Solid
799-IV-CS-SS-003	14-05-0512-7	05/07/14 13:18	1	Solid
799-IV-CS-SS-004	14-05-0512-8	05/07/14 13:19	1	Solid
799-IV-CS-SS-005	14-05-0512-9	05/07/14 13:20	1	Solid
799-IV-CS-SS-002	14-05-0512-10	05/07/14 13:25	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-0512
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/07/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1017 (14-05-0512-1)						
Arsenic	1.82		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	138		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.498		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	12.5		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	10.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	54.8		1.00	mg/kg	EPA 6010B	EPA 3050B
849-IV-P/S-O-001 (14-05-0512-2)						
Arsenic	2.49		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	103		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.627		0.256	mg/kg	EPA 6010B	EPA 3050B
Chromium	22.9		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.31		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	616		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	89.3		0.513	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.336		0.256	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.0		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.2		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	949		1.03	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	580		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-05-0512 Former Pechiney Cast Plate / 0106270030 05/07/14
Attn:	Linda Conlan		Page 2 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
849-IV-P/S-O-002 (14-05-0512-3)						
Arsenic	2.28		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	94.1		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.289		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.23		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	195		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	14.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	141		1.00	mg/kg	EPA 6010B	EPA 3050B
C19-C20	530		250	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	1600		250	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	3400		250	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	5500		250	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	17000		250	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	15000		250	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	4000		250	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	780		250	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	48000		250	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	900		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	850		500	ug/kg	EPA 8082	EPA 3540C
809-IV-P/S-O-002 (14-05-0512-4)						
Arsenic	0.940		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	25.1		0.498	mg/kg	EPA 6010B	EPA 3050B
Chromium	5.57		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	1.20		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	61.5		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	10.5		0.498	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.502		0.249	mg/kg	EPA 6010B	EPA 3050B
Nickel	3.23		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	6.83		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	13.7		0.995	mg/kg	EPA 6010B	EPA 3050B
C29-C32	6.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
815-IV-CS-SS-001 (14-05-0512-5)						
Aroclor-1248	54		50	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-0512
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/07/14
Attn:	Linda Conlan		Page 3 of 3

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-O-002	**14-05-0512-3-A**	**05/07/14 12:52**	**Solid**	**GC 47**	**05/07/14**	**05/08/14 11:29**	**140507B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	250	50.0	
C7	ND	250	50.0	
C8	ND	250	50.0	
C9-C10	ND	250	50.0	
C11-C12	ND	250	50.0	
C13-C14	ND	250	50.0	
C15-C16	ND	250	50.0	
C17-C18	ND	250	50.0	
C19-C20	530	250	50.0	
C21-C22	1600	250	50.0	
C23-C24	3400	250	50.0	
C25-C28	5500	250	50.0	
C29-C32	17000	250	50.0	
C33-C36	15000	250	50.0	
C37-C40	4000	250	50.0	
C41-C44	780	250	50.0	
C6-C44 Total	48000	250	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	118	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
809-IV-P/S-O-002	**14-05-0512-4-A**	**05/07/14 13:02**	**Solid**	**GC 47**	**05/07/14**	**05/08/14 11:13**	**140507B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	6.3	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	15	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	125	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-882**	**N/A**	**Solid**	**GC 47**	**05/07/14**	**05/07/14 18:20**	**140507B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	84	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1017	**14-05-0512-1-A**	**05/07/14 11:41**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 14:53**	**140507L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.82	0.750	1.00	
Barium	138	0.500	1.00	
Beryllium	0.498	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	17.6	0.250	1.00	
Cobalt	10.9	0.250	1.00	
Copper	12.5	0.500	1.00	
Lead	10.4	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	11.5	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	39.0	0.250	1.00	
Zinc	54.8	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-O-001	**14-05-0512-2-A**	**05/07/14 12:51**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 14:54**	**140507L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	2.49	0.769	1.03	
Barium	103	0.513	1.03	
Beryllium	0.627	0.256	1.03	
Cadmium	ND	0.513	1.03	
Chromium	22.9	0.256	1.03	
Cobalt	9.31	0.256	1.03	
Copper	616	0.513	1.03	
Lead	89.3	0.513	1.03	
Molybdenum	0.336	0.256	1.03	
Nickel	12.0	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	36.2	0.256	1.03	
Zinc	949	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-O-002	**14-05-0512-3-A**	**05/07/14 12:52**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 14:55**	**140507L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	2.28	0.750	1.00	
Barium	94.1	0.500	1.00	
Beryllium	0.289	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	13.6	0.250	1.00	
Cobalt	8.23	0.250	1.00	
Copper	195	0.500	1.00	
Lead	14.4	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	10.7	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	29.6	0.250	1.00	
Zinc	141	1.00	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
809-IV-P/S-O-002	**14-05-0512-4-A**	**05/07/14 13:02**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 14:56**	**140507L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	0.940	0.746	0.995	
Barium	25.1	0.498	0.995	
Beryllium	ND	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	5.57	0.249	0.995	
Cobalt	1.20	0.249	0.995	
Copper	61.5	0.498	0.995	
Lead	10.5	0.498	0.995	
Molybdenum	0.502	0.249	0.995	
Nickel	3.23	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	6.83	0.249	0.995	
Zinc	13.7	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18351**	**N/A**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 13:43**	**140507L06**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1017	**14-05-0512-1-A**	**05/07/14 11:41**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 17:08**	**140508L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

849-IV-P/S-O-001	**14-05-0512-2-A**	**05/07/14 12:51**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 17:14**	**140508L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

849-IV-P/S-O-002	**14-05-0512-3-A**	**05/07/14 12:52**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 17:17**	**140508L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

809-IV-P/S-O-002	**14-05-0512-4-A**	**05/07/14 13:02**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 17:19**	**140508L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Method Blank	**099-16-272-211**	**N/A**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 16:23**	**140508L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1017	**14-05-0512-1-A**	**05/07/14 11:41**	**Solid**	**GC 31**	**05/08/14**	**05/08/14 22:09**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	139	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	121	50-130	

849-IV-P/S-O-001	**14-05-0512-2-A**	**05/07/14 12:51**	**Solid**	**GC 31**	**05/08/14**	**05/08/14 22:28**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	580	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-O-002	**14-05-0512-3-A**	**05/07/14 12:52**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 16:53**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	900	500	10.0	
Aroclor-1254	850	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	70	50-130	

809-IV-P/S-O-002	**14-05-0512-4-A**	**05/07/14 13:02**	**Solid**	**GC 31**	**05/08/14**	**05/08/14 23:06**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
815-IV-CS-SS-001	**14-05-0512-5-A**	**05/07/14 13:06**	**Solid**	**GC 31**	**05/08/14**	**05/08/14 23:25**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	54	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

799-IV-CS-SS-001	**14-05-0512-6-A**	**05/07/14 13:18**	**Solid**	**GC 31**	**05/08/14**	**05/08/14 23:44**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
799-IV-CS-SS-003	**14-05-0512-7-A**	**05/07/14 13:18**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 00:03**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	135	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

799-IV-CS-SS-004	**14-05-0512-8-A**	**05/07/14 13:19**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 00:22**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
799-IV-CS-SS-005	**14-05-0512-9-A**	**05/07/14 13:20**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 00:41**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

799-IV-CS-SS-002	**14-05-0512-10-A**	**05/07/14 13:25**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 01:01**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-245**	**N/A**	**Solid**	**GC 31**	**05/08/14**	**05/08/14 21:31**	**140507L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0296-6	**Sample**	**Solid**	**GC 47**	**05/07/14**	**05/07/14 20:00**	**140507S12**
14-05-0296-6	**Matrix Spike**	**Solid**	**GC 47**	**05/07/14**	**05/07/14 18:54**	**140507S12**
14-05-0296-6	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**05/07/14**	**05/07/14 19:11**	**140507S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	390.0	98	393.9	98	64-130	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0406-3	**Sample**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 14:01**	**140507S06**
14-05-0406-3	**Matrix Spike**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 14:03**	**140507S06**
14-05-0406-3	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 14:04**	**140507S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	13.57	54	13.31	53	50-115	2	0-20	
Arsenic	0.9398	25.00	27.10	105	25.90	100	75-125	5	0-20	
Barium	16.29	25.00	43.39	108	42.50	105	75-125	2	0-20	
Beryllium	ND	25.00	26.71	107	26.54	106	75-125	1	0-20	
Cadmium	ND	25.00	26.47	106	26.06	104	75-125	2	0-20	
Chromium	9.414	25.00	36.47	108	35.60	105	75-125	2	0-20	
Cobalt	3.250	25.00	31.14	112	30.59	109	75-125	2	0-20	
Copper	1.238	25.00	28.66	110	28.19	108	75-125	2	0-20	
Lead	1.845	25.00	29.03	109	28.24	106	75-125	3	0-20	
Molybdenum	ND	25.00	25.15	101	24.70	99	75-125	2	0-20	
Nickel	2.774	25.00	29.94	109	29.40	107	75-125	2	0-20	
Selenium	ND	25.00	24.07	96	22.59	90	75-125	6	0-20	
Silver	ND	12.50	13.17	105	13.01	104	75-125	1	0-20	
Thallium	ND	25.00	24.18	97	24.42	98	75-125	1	0-20	
Vanadium	30.30	25.00	57.67	109	55.98	103	75-125	3	0-20	
Zinc	6.798	25.00	33.30	106	32.76	104	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0406-3	**Sample**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 16:32**	**140508S01**
14-05-0406-3	**Matrix Spike**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 16:34**	**140508S01**
14-05-0406-3	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 16:36**	**140508S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7527	90	0.7697	92	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
799-IV-CS-SS-002	**Sample**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 01:01**	**140517S18**
799-IV-CS-SS-002	**Matrix Spike**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 01:20**	**140517S18**
799-IV-CS-SS-002	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 01:39**	**140517S18**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	92.45	92	92.46	92	50-135	0	0-25	
Aroclor-1260	ND	100.0	101.8	102	105.7	106	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-882	**LCS**	**Solid**	**GC 47**	**05/07/14**	**05/07/14 18:37**	**140507B12**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	365.8	91	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18351	**LCS**	**Solid**	**ICP 7300**	**05/07/14**	**05/08/14 13:50**	**140507L06**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.12	104	80-120	73-127	
Arsenic	25.00	24.63	99	80-120	73-127	
Barium	25.00	25.44	102	80-120	73-127	
Beryllium	25.00	24.50	98	80-120	73-127	
Cadmium	25.00	25.84	103	80-120	73-127	
Chromium	25.00	25.73	103	80-120	73-127	
Cobalt	25.00	27.73	111	80-120	73-127	
Copper	25.00	25.90	104	80-120	73-127	
Lead	25.00	26.76	107	80-120	73-127	
Molybdenum	25.00	25.83	103	80-120	73-127	
Nickel	25.00	27.08	108	80-120	73-127	
Selenium	25.00	22.10	88	80-120	73-127	
Silver	12.50	12.79	102	80-120	73-127	
Thallium	25.00	26.49	106	80-120	73-127	
Vanadium	25.00	24.78	99	80-120	73-127	
Zinc	25.00	25.43	102	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-211	**LCS**	**Solid**	**Mercury 05**	**05/08/14**	**05/08/14 16:25**	**140508L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8405	101	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/07/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0512
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-245	**LCS**	**Solid**	**GC 31**	**05/08/14**	**05/08/14 21:50**	**140507L18**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	101.1	101	50-135	
Aroclor-1260	100.0	106.7	107	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-0512

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury 05	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-0512 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31329

PROJECT NAME: FORMER PENTNEY CAST PLATE			DATE: 5/7/14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48-HR			14-05-0512
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: STEVE NOWAK		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Stephen Hwang

ANALYSES

	DATE	TIME	SAMPLE NUMBER	PCBs EPA 8082	metals 6010/7471	TPH 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5/7/14	1141	#1017	X	X		4 oz glass jar	S		None	X		1	
2		1251	849-IV-P/S-O-001	X	X								1	
3		1252	849-IV-P/S-O-002	X	X	X							1	
4		1302	809-IV-P/S-O-002	X	X	X							1	
5		1306	815-IV-CS-SS-001	X									1	
6		1318	799-IV-CS-SS-001	X									1	
7		1318	799-IV-CS-SS-003	X									1	
		~~1320~~	~~799~~											
		1325												
8	5/7/14	1319	799-IV-CS-SS-004	X						None			1	
9		1320	799-IV-CS-SS-005	X									1	
10		1325	799-IV-CS-SS-002	X									1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/7/14	1510	SIGNATURE: [signature] PRINTED NAME: Alex Marquez COMPANY: CEC	5/7/14	1510
SIGNATURE: [signature] PRINTED NAME: Alex Marquez COMPANY: CEC	5/7/14	1741	SIGNATURE: [signature] PRINTED NAME: Peggy Soriano COMPANY:	5/7/14	1741
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 10

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-0512

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/7/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 920

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 920

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 802

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-0633

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/13/2014 by:
Stephen Nowak
Project Manager

ResultLink ▸

Email your PM ▸

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-05-0633

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-0633 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/08/14. They were assigned to Work Order 14-05-0633.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-0633
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	05/08/14 17:00
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
855-IV-P/S-O-001	14-05-0633-1	05/08/14 07:57	1	Solid
293-IV-P/S-CS-031	14-05-0633-2	05/08/14 08:09	1	Concrete
293-IV-P/S-CS-032	14-05-0633-3	05/08/14 08:17	1	Concrete
849-IV-P/S-CS-001	14-05-0633-4	05/08/14 08:28	1	Concrete
838-IV-P/S-CS-001	14-05-0633-5	05/08/14 08:49	1	Concrete
855-IV-P/S-CS-001	14-05-0633-6	05/08/14 10:44	1	Concrete
861-IIA-F/F-CS-001	14-05-0633-7	05/08/14 10:51	1	Concrete
293-IV-P/S-O-002	14-05-0633-8	05/08/14 11:15	1	Concrete
293-IV-P/S-O-003	14-05-0633-9	05/08/14 14:08	1	Sludge

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-0633
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/08/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
855-IV-P/S-O-001 (14-05-0633-1)						
Arsenic	1.27		0.714	mg/kg	EPA 6010B	EPA 3050B
Barium	112		0.476	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.411		0.238	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.8		0.238	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.92		0.238	mg/kg	EPA 6010B	EPA 3050B
Copper	24.7		0.476	mg/kg	EPA 6010B	EPA 3050B
Lead	6.98		0.476	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.261		0.238	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.2		0.238	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.9		0.238	mg/kg	EPA 6010B	EPA 3050B
Zinc	72.0		0.952	mg/kg	EPA 6010B	EPA 3050B
C6-C44 Total	9.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
293-IV-P/S-CS-031 (14-05-0633-2)						
Aroclor-1248	86		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	93		50	ug/kg	EPA 8082	EPA 3540C
293-IV-P/S-CS-032 (14-05-0633-3)						
Aroclor-1248	34000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	8400		500	ug/kg	EPA 8082	EPA 3540C
849-IV-P/S-CS-001 (14-05-0633-4)						
Aroclor-1248	380		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	110		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-0633
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/08/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
293-IV-P/S-O-003 (14-05-0633-9)						
Arsenic	5.77		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	99.7		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.490		0.245	mg/kg	EPA 6010B	EPA 3050B
Cadmium	2.34		0.490	mg/kg	EPA 6010B	EPA 3050B
Chromium	22.0		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	4.69		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	111		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	123		0.490	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	171		0.245	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.6		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	14.6		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	359		0.980	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.111		0.0820	mg/kg	EPA 7471A	EPA 7471A Total
C13-C14	21		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	15		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	110		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	14		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	25		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	29		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	410		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	670		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	110		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	61		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	42		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1500		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	14000		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	4000		2500	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
855-IV-P/S-O-001	**14-05-0633-1-A**	**05/08/14 07:57**	**Solid**	**GC 45**	**05/09/14**	**05/09/14 17:37**	**140509B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	ND	5.0	0.990	
C25-C28	ND	5.0	0.990	
C29-C32	ND	5.0	0.990	
C33-C36	ND	5.0	0.990	
C37-C40	ND	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	9.2	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	121	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-003	**14-05-0633-9-A**	**05/08/14 14:08**	**Sludge**	**GC 45**	**05/09/14**	**05/09/14 17:54**	**140509B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	21	4.9	0.980	
C15-C16	15	4.9	0.980	
C17-C18	110	4.9	0.980	
C19-C20	14	4.9	0.980	
C21-C22	25	4.9	0.980	
C23-C24	29	4.9	0.980	
C25-C28	410	4.9	0.980	
C29-C32	670	4.9	0.980	
C33-C36	110	4.9	0.980	
C37-C40	61	4.9	0.980	
C41-C44	42	4.9	0.980	
C6-C44 Total	1500	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-887**	**N/A**	**Solid**	**GC 45**	**05/09/14**	**05/09/14 16:05**	**140509B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	118	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
855-IV-P/S-O-001	**14-05-0633-1-A**	**05/08/14 07:57**	**Solid**	**ICP 7300**	**05/08/14**	**05/09/14 14:50**	**140508L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.714	0.952	
Arsenic	1.27	0.714	0.952	
Barium	112	0.476	0.952	
Beryllium	0.411	0.238	0.952	
Cadmium	ND	0.476	0.952	
Chromium	14.8	0.238	0.952	
Cobalt	9.92	0.238	0.952	
Copper	24.7	0.476	0.952	
Lead	6.98	0.476	0.952	
Molybdenum	0.261	0.238	0.952	
Nickel	11.2	0.238	0.952	
Selenium	ND	0.714	0.952	
Silver	ND	0.238	0.952	
Thallium	ND	0.714	0.952	
Vanadium	30.9	0.238	0.952	
Zinc	72.0	0.952	0.952	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-003	**14-05-0633-9-A**	**05/08/14 14:08**	**Sludge**	**ICP 7300**	**05/08/14**	**05/09/14 14:57**	**140508L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	5.77	0.735	0.980	
Barium	99.7	0.490	0.980	
Beryllium	0.490	0.245	0.980	
Cadmium	2.34	0.490	0.980	
Chromium	22.0	0.245	0.980	
Cobalt	4.69	0.245	0.980	
Copper	111	0.490	0.980	
Lead	123	0.490	0.980	
Molybdenum	171	0.245	0.980	
Nickel	11.6	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	14.6	0.245	0.980	
Zinc	359	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18355**	**N/A**	**Solid**	**ICP 7300**	**05/08/14**	**05/08/14 18:32**	**140508L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
855-IV-P/S-O-001	**14-05-0633-1-A**	**05/08/14 07:57**	**Solid**	**Mercury 05**	**05/09/14**	**05/09/14 16:10**	**140509L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

293-IV-P/S-O-003	**14-05-0633-9-A**	**05/08/14 14:08**	**Sludge**	**Mercury 05**	**05/09/14**	**05/09/14 16:12**	**140509L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.111	0.0820	1.00	

Method Blank	**099-16-272-216**	**N/A**	**Solid**	**Mercury 05**	**05/09/14**	**05/09/14 15:43**	**140509L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
855-IV-P/S-O-001	**14-05-0633-1-A**	**05/08/14 07:57**	**Solid**	**GC 31**	**05/08/14**	**05/12/14 15:34**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	130	50-130	

293-IV-P/S-CS-031	**14-05-0633-2-A**	**05/08/14 08:09**	**Concrete**	**GC 31**	**05/08/14**	**05/09/14 19:44**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	86	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	93	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-CS-032	**14-05-0633-3-A**	**05/08/14 08:17**	**Concrete**	**GC 31**	**05/08/14**	**05/12/14 12:27**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	8400	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	226	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	130	50-130	

293-IV-P/S-CS-032	**14-05-0633-3-A**	**05/08/14 08:17**	**Concrete**	**GC 31**	**05/08/14**	**05/12/14 16:57**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	34000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	146	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-CS-001	**14-05-0633-4-A**	**05/08/14 08:28**	**Concrete**	**GC 31**	**05/08/14**	**05/09/14 20:23**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	380	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	110	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

838-IV-P/S-CS-001	**14-05-0633-5-A**	**05/08/14 08:49**	**Concrete**	**GC 31**	**05/08/14**	**05/09/14 20:42**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
855-IV-P/S-CS-001	**14-05-0633-6-A**	**05/08/14 10:44**	**Concrete**	**GC 31**	**05/08/14**	**05/09/14 21:01**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

861-IIA-F/F-CS-001	**14-05-0633-7-A**	**05/08/14 10:51**	**Concrete**	**GC 31**	**05/08/14**	**05/09/14 21:20**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-002	**14-05-0633-8-A**	**05/08/14 11:15**	**Concrete**	**GC 31**	**05/08/14**	**05/09/14 21:39**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

293-IV-P/S-O-003	**14-05-0633-9-A**	**05/08/14 14:08**	**Sludge**	**GC 31**	**05/08/14**	**05/12/14 16:38**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	2500	50.0	
Aroclor-1221	ND	2500	50.0	
Aroclor-1232	ND	2500	50.0	
Aroclor-1242	ND	2500	50.0	
Aroclor-1248	14000	2500	50.0	
Aroclor-1254	ND	2500	50.0	
Aroclor-1260	4000	2500	50.0	
Aroclor-1262	ND	2500	50.0	
Aroclor-1268	ND	2500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	146	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	50	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-246**	**N/A**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 18:28**	**140508L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0434-1	**Sample**	**Solid**	**GC 45**	**05/09/14**	**05/09/14 17:18**	**140509S01**
14-05-0434-1	**Matrix Spike**	**Solid**	**GC 45**	**05/09/14**	**05/09/14 16:41**	**140509S01**
14-05-0434-1	**Matrix Spike Duplicate**	**Solid**	**GC 45**	**05/09/14**	**05/09/14 16:59**	**140509S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	5.982	400.0	436.1	108	409.7	101	64-130	6	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0453-7	**Sample**	**Solid**	**ICP 7300**	**05/08/14**	**05/08/14 18:35**	**140508S01**
14-05-0453-7	**Matrix Spike**	**Solid**	**ICP 7300**	**05/08/14**	**05/08/14 18:36**	**140508S01**
14-05-0453-7	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/08/14**	**05/08/14 18:37**	**140508S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	6.745	27	5.503	22	50-115	20	0-20	3
Arsenic	2.472	25.00	29.28	107	30.68	113	75-125	5	0-20	
Barium	114.2	25.00	152.5	4X	152.6	4X	75-125	4X	0-20	Q
Beryllium	0.2596	25.00	27.37	108	27.24	108	75-125	0	0-20	
Cadmium	ND	25.00	26.43	106	26.21	105	75-125	1	0-20	
Chromium	78.09	25.00	104.8	107	104.3	105	75-125	0	0-20	
Cobalt	17.00	25.00	45.07	112	43.74	107	75-125	3	0-20	
Copper	32.29	25.00	61.00	115	61.58	117	75-125	1	0-20	
Lead	63.03	25.00	114.4	205	103.8	163	75-125	10	0-20	3
Molybdenum	ND	25.00	24.10	96	23.71	95	75-125	2	0-20	
Nickel	65.81	25.00	93.90	112	93.84	112	75-125	0	0-20	
Selenium	ND	25.00	21.70	87	22.32	89	75-125	3	0-20	
Silver	ND	12.50	13.41	107	13.37	107	75-125	0	0-20	
Thallium	ND	25.00	22.73	91	22.97	92	75-125	1	0-20	
Vanadium	80.87	25.00	107.0	105	106.6	103	75-125	0	0-20	
Zinc	136.1	25.00	210.3	4X	181.7	4X	75-125	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0564-4	**Sample**	**Tissue**	**Mercury 05**	**05/09/14**	**05/09/14 15:59**	**140509S01**
14-05-0564-4	**Matrix Spike**	**Tissue**	**Mercury 05**	**05/09/14**	**05/09/14 16:01**	**140509S01**
14-05-0564-4	**Matrix Spike Duplicate**	**Tissue**	**Mercury 05**	**05/09/14**	**05/09/14 16:03**	**140509S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.5000	0.3933	79	0.3985	80	76-136	1	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
855-IV-P/S-O-001	**Sample**	**Solid**	**GC 31**	**05/08/14**	**05/12/14 15:34**	**140508S24**
855-IV-P/S-O-001	**Matrix Spike**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 21:58**	**140508S24**
855-IV-P/S-O-001	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 22:17**	**140508S24**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	106.8	107	115.0	115	50-135	7	0-25	
Aroclor-1260	ND	100.0	132.8	133	153.7	154	50-135	15	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-887	**LCS**	**Solid**	**GC 45**	**05/09/14**	**05/09/14 16:23**	**140509B01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	404.7	101	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18355	**LCS**	**Solid**	**ICP 7300**	**05/08/14**	**05/08/14 18:33**	**140508L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.78	103	80-120	73-127	
Arsenic	25.00	25.02	100	80-120	73-127	
Barium	25.00	25.71	103	80-120	73-127	
Beryllium	25.00	24.05	96	80-120	73-127	
Cadmium	25.00	25.71	103	80-120	73-127	
Chromium	25.00	25.83	103	80-120	73-127	
Cobalt	25.00	27.56	110	80-120	73-127	
Copper	25.00	24.69	99	80-120	73-127	
Lead	25.00	26.36	105	80-120	73-127	
Molybdenum	25.00	25.31	101	80-120	73-127	
Nickel	25.00	27.24	109	80-120	73-127	
Selenium	25.00	21.96	88	80-120	73-127	
Silver	12.50	12.67	101	80-120	73-127	
Thallium	25.00	26.31	105	80-120	73-127	
Vanadium	25.00	24.68	99	80-120	73-127	
Zinc	25.00	25.06	100	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-216	**LCS**	**Solid**	**Mercury 05**	**05/09/14**	**05/09/14 15:45**	**140509L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8530	102	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/08/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0633
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-246	**LCS**	**Solid**	**GC 31**	**05/08/14**	**05/09/14 18:09**	**140508L24**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	94.62	95	50-135	
Aroclor-1260	100.0	101.4	101	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-0633

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	914	Mercury 05	1
EPA 8015B (M)	EPA 3550B	682	GC 45	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-0633

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 26866

PROJECT NAME: Pechiney

DATE: 5-8-14 PAGE 1 OF 1

PROJECT NUMBER: 01062700.30

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-05-0633

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-8-14	0757	855-IV-P/S-0-001	X	X	X	4oz glass jar	S			X		1	
2		0809	293-IV-P/S-CS-031	X				O			X		1	concrete
3		0817	293-IV-P/S-CS-032	X				O			X		1	
4		0828	849-IV-P/S-CS-001	X				O			X		1	
5		0849	838-IV-P/S-CS-001	X				O			X		1	
6		1044	855-IV-P/S-CS-001	X				O			X		1	
7		1051	861-IV-F/F-CS-001	X				O			X		1	
8		1115	293-IV-P/S-0-002	X				S			X		1	
9		1408	293-IV-P/S-0-003	X	X	X		O			X		1	Sludge

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	5/8/14	1400	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	5/8/14	1400
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	5/8/14	1510	SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: CEC	5/8/14	1510
SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: CEC	5/8/14	1700	SIGNATURE: PRINTED NAME: Pam COMPANY: CON	5/8/14	1700

TOTAL NUMBER OF CONTAINERS: 9

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-0633

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/8/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 802

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 802

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 300

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 300

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Stephen Nowak

From: Huang, Stephen [Stephen.Huang@amec.com]
Sent: Thursday, May 08, 2014 3:47 PM
To: Stephen Nowak
Cc: Conlan, Linda; Holland, Kim; Costamagna, Daniel G; Lee, Zhur
Subject: Pechiney: Sample ID Correction (Samples collected on May 8, 2014)

Hello Steve,

For the samples collected today on May 8, 2014, can you please make the following change to the Sample ID?

From: 861-IV-F/F-CS-001 **To:** 861-IIA-F/F-CS-001

Thanks,
Stephen

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed.
Its contents (including any attachments) may contain confidential and/or privileged information.
If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents.
If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message.

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-0888

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/14/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

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Work Order Number: 14-05-0888

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-0888 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/12/14. They were assigned to Work Order 14-05-0888.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-0888
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	05/12/14 17:53
		Number of Containers:	3
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
777-IV-P/S-SS-002	14-05-0888-1	05/12/14 08:47	1	Solid
768-IIB-CS-SS-003	14-05-0888-2	05/12/14 09:03	1	Solid
815-IV-CS-SS-002	14-05-0888-3	05/12/14 12:58	1	Solid

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/12/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0888
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
777-IV-P/S-SS-002	**14-05-0888-1-A**	**05/12/14 08:47**	**Solid**	**GC 31**	**05/12/14**	**05/13/14 19:17**	**140512L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	116	50-130	

768-IIB-CS-SS-003	**14-05-0888-2-A**	**05/12/14 09:03**	**Solid**	**GC 31**	**05/12/14**	**05/13/14 19:36**	**140512L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/12/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0888
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
815-IV-CS-SS-002	**14-05-0888-3-A**	**05/12/14 12:58**	**Solid**	**GC 31**	**05/12/14**	**05/13/14 19:55**	**140512L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	127	50-130	

Method Blank	**099-02-003-247**	**N/A**	**Solid**	**GC 31**	**05/12/14**	**05/13/14 18:20**	**140512L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	81	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/12/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0888
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
768-IIB-CS-SS-003	**Sample**	**Solid**	**GC 31**	**05/12/14**	**05/13/14 19:36**	**140512S16**
768-IIB-CS-SS-003	**Matrix Spike**	**Solid**	**GC 31**	**05/12/14**	**05/13/14 18:39**	**140512S16**
768-IIB-CS-SS-003	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**05/12/14**	**05/13/14 18:58**	**140512S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	110.3	110	111.9	112	50-135	1	0-25	
Aroclor-1260	ND	100.0	92.96	93	92.06	92	50-135	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/12/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0888
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-247	**LCS**	**Solid**	**GC 31**	**05/12/14**	**05/13/14 18:01**	**140512L16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	112.9	113	50-135	
Aroclor-1260	100.0	87.80	88	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-0888

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-0888

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31330

PROJECT NAME: Pechiney

DATE: 5-12-14

PAGE 1 OF 1

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-05-0888

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-12-14	0847	777-IV-P/S-SS-002	X	4oz glass jar	S			X		1	
2	↓	0903	768-IIB-CS-SS-003	X	↓	S			X		1	
3	↓	1258	815-IV-CS-SS-002	X	↓	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	5/12/14	1430	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	5/12/14	1430
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	5/12/14	1505	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEL	5/12/14	1505
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEL	5/12/14	1753	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CEL	5/12/14	1753

TOTAL NUMBER OF CONTAINERS: 3

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-0888

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/12/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 859

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-0986

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/15/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-05-0986

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-0986 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/13/14. They were assigned to Work Order 14-05-0986.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-0986
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	05/13/14 17:20
		Number of Containers:	7
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
624-IIB-P/S-CS-001	14-05-0986-1	05/13/14 07:15	1	Concrete
624-IIB-P/S-CS-002	14-05-0986-2	05/13/14 07:19	1	Concrete
849-IV-P/S-SS-001	14-05-0986-3	05/13/14 09:15	1	Solid
849-IV-P/S-SS-002	14-05-0986-4	05/13/14 09:21	1	Solid
801-IV-P/S-SS-001	14-05-0986-5	05/13/14 09:26	1	Solid
#1018	14-05-0986-6	05/13/14 09:40	1	Solid
DC-425	14-05-0986-7	05/13/14 13:30	1	Concrete

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-0986
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/13/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
624-IIB-P/S-CS-001 (14-05-0986-1)						
Aroclor-1248	99		50	ug/kg	EPA 8082	EPA 3540C
624-IIB-P/S-CS-002 (14-05-0986-2)						
Aroclor-1248	240		50	ug/kg	EPA 8082	EPA 3540C
849-IV-P/S-SS-001 (14-05-0986-3)						
Arsenic	0.949		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	140		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.420		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.6		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.6		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	19.9		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	3.63		0.508	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.310		0.254	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.7		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.8		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	55.3		1.02	mg/kg	EPA 6010B	EPA 3050B
C23-C24	7.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	20		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	42		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	27		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	110		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
849-IV-P/S-SS-002 (14-05-0986-4)						
Arsenic	0.812		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	132		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.371		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.8		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.3		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	17.0		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	2.00		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.3		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.3		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	50.6		1.02	mg/kg	EPA 6010B	EPA 3050B
801-IV-P/S-SS-001 (14-05-0986-5)						
Aroclor-1248	79		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-0986
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/13/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1018 (14-05-0986-6)						
Arsenic	1.48		0.732	mg/kg	EPA 6010B	EPA 3050B
Barium	119		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.338		0.244	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.954		0.488	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.7		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.03		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	213		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	364		0.488	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.5		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	27.6		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	200		0.976	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.203		0.0847	mg/kg	EPA 7471A	EPA 7471A Total
DC-425 (14-05-0986-7)						
Aroclor-1248	12000000		5000000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	360000		50000	ug/kg	EPA 8082	EPA 3540C

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-SS-001	**14-05-0986-3-A**	**05/13/14 09:15**	**Solid**	**GC 46**	**05/13/14**	**05/14/14 12:17**	**140513B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	0.990	
C7	ND	5.0	0.990	
C8	ND	5.0	0.990	
C9-C10	ND	5.0	0.990	
C11-C12	ND	5.0	0.990	
C13-C14	ND	5.0	0.990	
C15-C16	ND	5.0	0.990	
C17-C18	ND	5.0	0.990	
C19-C20	ND	5.0	0.990	
C21-C22	ND	5.0	0.990	
C23-C24	7.7	5.0	0.990	
C25-C28	20	5.0	0.990	
C29-C32	42	5.0	0.990	
C33-C36	27	5.0	0.990	
C37-C40	11	5.0	0.990	
C41-C44	ND	5.0	0.990	
C6-C44 Total	110	5.0	0.990	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-SS-002	**14-05-0986-4-A**	**05/13/14 09:21**	**Solid**	**GC 46**	**05/13/14**	**05/14/14 12:34**	**140513B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	ND	4.9	0.980	
C11-C12	ND	4.9	0.980	
C13-C14	ND	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	ND	4.9	0.980	
C19-C20	ND	4.9	0.980	
C21-C22	ND	4.9	0.980	
C23-C24	ND	4.9	0.980	
C25-C28	ND	4.9	0.980	
C29-C32	ND	4.9	0.980	
C33-C36	ND	4.9	0.980	
C37-C40	ND	4.9	0.980	
C41-C44	ND	4.9	0.980	
C6-C44 Total	ND	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	92	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-890**	**N/A**	**Solid**	**GC 46**	**05/13/14**	**05/13/14 15:38**	**140513B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	106	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-SS-001	**14-05-0986-3-A**	**05/13/14 09:15**	**Solid**	**ICP 7300**	**05/13/14**	**05/14/14 16:15**	**140513L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	0.949	0.761	1.02	
Barium	140	0.508	1.02	
Beryllium	0.420	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	16.6	0.254	1.02	
Cobalt	11.6	0.254	1.02	
Copper	19.9	0.508	1.02	
Lead	3.63	0.508	1.02	
Molybdenum	0.310	0.254	1.02	
Nickel	12.7	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	35.8	0.254	1.02	
Zinc	55.3	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-SS-002	**14-05-0986-4-A**	**05/13/14 09:21**	**Solid**	**ICP 7300**	**05/13/14**	**05/14/14 16:20**	**140513L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	0.812	0.761	1.02	
Barium	132	0.508	1.02	
Beryllium	0.371	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	15.8	0.254	1.02	
Cobalt	11.3	0.254	1.02	
Copper	17.0	0.508	1.02	
Lead	2.00	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	12.3	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	34.3	0.254	1.02	
Zinc	50.6	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1018	**14-05-0986-6-A**	**05/13/14 09:40**	**Solid**	**ICP 7300**	**05/13/14**	**05/14/14 16:21**	**140513L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.732	0.976	
Arsenic	1.48	0.732	0.976	
Barium	119	0.488	0.976	
Beryllium	0.338	0.244	0.976	
Cadmium	0.954	0.488	0.976	
Chromium	13.7	0.244	0.976	
Cobalt	9.03	0.244	0.976	
Copper	213	0.488	0.976	
Lead	364	0.488	0.976	
Molybdenum	ND	0.244	0.976	
Nickel	11.5	0.244	0.976	
Selenium	ND	0.732	0.976	
Silver	ND	0.244	0.976	
Thallium	ND	0.732	0.976	
Vanadium	27.6	0.244	0.976	
Zinc	200	0.976	0.976	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18370**	**N/A**	**Solid**	**ICP 7300**	**05/13/14**	**05/14/14 10:53**	**140513L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-SS-001	**14-05-0986-3-A**	**05/13/14 09:15**	**Solid**	**Mercury 04**	**05/14/14**	**05/14/14 14:05**	**140514L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

849-IV-P/S-SS-002	**14-05-0986-4-A**	**05/13/14 09:21**	**Solid**	**Mercury 04**	**05/14/14**	**05/14/14 14:07**	**140514L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

#1018	**14-05-0986-6-A**	**05/13/14 09:40**	**Solid**	**Mercury 04**	**05/14/14**	**05/14/14 14:10**	**140514L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.203	0.0847	1.00	

Method Blank	**099-16-272-227**	**N/A**	**Solid**	**Mercury 04**	**05/14/14**	**05/14/14 13:23**	**140514L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
624-IIB-P/S-CS-001	**14-05-0986-1-A**	**05/13/14 07:15**	**Concrete**	**GC 66**	**05/13/14**	**05/15/14 14:40**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	99	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

624-IIB-P/S-CS-002	**14-05-0986-2-A**	**05/13/14 07:19**	**Concrete**	**GC 66**	**05/13/14**	**05/15/14 14:57**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	240	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
849-IV-P/S-SS-001	**14-05-0986-3-A**	**05/13/14 09:15**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 15:15**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

849-IV-P/S-SS-002	**14-05-0986-4-A**	**05/13/14 09:21**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 15:33**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
801-IV-P/S-SS-001	**14-05-0986-5-A**	**05/13/14 09:26**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 15:51**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	79	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

#1018	**14-05-0986-6-A**	**05/13/14 09:40**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 16:09**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-425	**14-05-0986-7-A**	**05/13/14 13:30**	**Concrete**	**GC 66**	**05/13/14**	**05/15/14 16:27**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	360000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	610	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

DC-425	**14-05-0986-7-A**	**05/13/14 13:30**	**Concrete**	**GC 66**	**05/13/14**	**05/15/14 16:44**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	12000000	5000000	100000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	0	60-125	1,2,6
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-248**	**N/A**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 13:46**	**140513L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0900-2	**Sample**	**Solid**	**GC 46**	**05/13/14**	**05/13/14 17:06**	**140513S02**
14-05-0900-2	**Matrix Spike**	**Solid**	**GC 46**	**05/13/14**	**05/13/14 16:14**	**140513S02**
14-05-0900-2	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**05/13/14**	**05/13/14 16:32**	**140513S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	387.9	97	437.8	109	64-130	12	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0969-1	**Sample**	**Solid**	**ICP 7300**	**05/13/14**	**05/14/14 10:56**	**140513S03**
14-05-0969-1	**Matrix Spike**	**Solid**	**ICP 7300**	**05/13/14**	**05/14/14 10:57**	**140513S03**
14-05-0969-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/13/14**	**05/14/14 10:58**	**140513S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	5.472	22	5.231	21	50-115	4	0-20	3
Arsenic	11.49	25.00	33.70	89	37.83	105	75-125	12	0-20	
Barium	135.3	25.00	150.7	4X	165.9	4X	75-125	4X	0-20	Q
Beryllium	0.5390	25.00	25.08	98	26.87	105	75-125	7	0-20	
Cadmium	1.059	25.00	23.60	90	25.26	97	75-125	7	0-20	
Chromium	32.15	25.00	55.42	93	61.18	116	75-125	10	0-20	
Cobalt	11.57	25.00	32.83	85	35.42	95	75-125	8	0-20	
Copper	38.84	25.00	62.84	96	64.72	104	75-125	3	0-20	
Lead	9.975	25.00	29.73	79	33.38	94	75-125	12	0-20	
Molybdenum	3.103	25.00	23.57	82	26.21	92	75-125	11	0-20	
Nickel	25.93	25.00	47.14	85	54.50	114	75-125	14	0-20	
Selenium	ND	25.00	20.90	84	22.14	89	75-125	6	0-20	
Silver	ND	12.50	12.13	97	13.13	105	75-125	8	0-20	
Thallium	ND	25.00	12.37	49	17.53	70	75-125	35	0-20	3,4
Vanadium	52.21	25.00	71.07	75	79.83	110	75-125	12	0-20	
Zinc	198.9	25.00	159.4	4X	135.5	4X	75-125	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0795-2	**Sample**	**Solid**	**Mercury 04**	**05/14/14**	**05/14/14 13:40**	**140514S01**
14-05-0795-2	**Matrix Spike**	**Solid**	**Mercury 04**	**05/14/14**	**05/14/14 13:43**	**140514S01**
14-05-0795-2	**Matrix Spike Duplicate**	**Solid**	**Mercury 04**	**05/14/14**	**05/14/14 13:49**	**140514S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7807	93	0.8755	105	71-137	11	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
849-IV-P/S-SS-001	**Sample**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 15:15**	**140513S16**
849-IV-P/S-SS-001	**Matrix Spike**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 14:04**	**140513S16**
849-IV-P/S-SS-001	**Matrix Spike Duplicate**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 14:22**	**140513S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	99.02	99	92.82	93	50-135	6	0-25	
Aroclor-1260	ND	100.0	108.1	108	108.5	109	50-135	0	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-890	**LCS**	**Solid**	**GC 46**	**05/13/14**	**05/13/14 15:56**	**140513B02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	409.4	102	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18370	**LCS**	**Solid**	**ICP 7300**	**05/13/14**	**05/14/14 10:54**	**140513L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.38	106	80-120	73-127	
Arsenic	25.00	25.97	104	80-120	73-127	
Barium	25.00	25.82	103	80-120	73-127	
Beryllium	25.00	25.54	102	80-120	73-127	
Cadmium	25.00	26.66	107	80-120	73-127	
Chromium	25.00	26.39	106	80-120	73-127	
Cobalt	25.00	28.35	113	80-120	73-127	
Copper	25.00	26.12	104	80-120	73-127	
Lead	25.00	27.36	109	80-120	73-127	
Molybdenum	25.00	26.80	107	80-120	73-127	
Nickel	25.00	27.82	111	80-120	73-127	
Selenium	25.00	23.83	95	80-120	73-127	
Silver	12.50	12.99	104	80-120	73-127	
Thallium	25.00	27.68	111	80-120	73-127	
Vanadium	25.00	25.37	101	80-120	73-127	
Zinc	25.00	26.26	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-227	**LCS**	**Solid**	**Mercury 04**	**05/14/14**	**05/14/14 13:31**	**140514L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8734	105	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-248	**LCS**	**Solid**	**GC 66**	**05/13/14**	**05/15/14 13:28**	**140513L16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	91.36	91	50-135	
Aroclor-1260	100.0	100.3	100	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-0986

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	776	Mercury 04	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	669	GC 66	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-0986 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31331

PROJECT NAME: Pechiney

DATE: 5-13-14 | PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

14-05-0986

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

GEOTRACKER REQUIRED YES NO

LABORATORY PHONE NUMBER:

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-13-14	0715	624-IIB-P/S-CS-001	X			4 oz glass jar	O			X		1	concrete
2		0719	624-IIB-P/S-CS-002	X				O			X		1	concrete
3		0915	849-IV-P/S-SS-001	X	X	X		S			X		1	
4		0921	849-IV-P/S-SS-002	X	X	X		S			X		1	
5		0926	801-IV-P/S-SS-001	X				S			X		1	
6		0940	#1018	X	X			S			X		1	
7		1330	DC-425	X				O			X		1	concrete

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	5/13/14	14:00	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/13/14	14:00
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/13/14	15:45	SIGNATURE: PRINTED NAME: D. Irawan COMPANY: CEL	5/13/14	15.45
SIGNATURE: PRINTED NAME: D. Irawan COMPANY: CEL	5/13/14	17.20	SIGNATURE: PRINTED NAME: Yan Lian COMPANY: CEL	5/13/14	17:20

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-0986

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/13/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.0 °C - 0.3 °C (CF) = 2.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 896

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 896

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 689

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 689

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Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 14-05-0986

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/13/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Pechiney / 0106270030
Work Order Number: 14-05-0986

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4 Quality Control Sample Data. 6
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Work Order Narrative

Work Order: 14-05-0986 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/13/14. They were assigned to Work Order 14-05-0986.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-0986
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	05/13/14 17:20
		Number of Containers:	7
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
801-IV-P/S-SS-001	14-05-0986-5	05/13/14 09:26	1	Solid

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
801-IV-P/S-SS-001	**14-05-0986-5-A**	**05/13/14 09:26**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 19:03**	**140609L08**

Parameter	Result	RL	DF	Qualifiers
Arsenic	2.04	0.754	1.01	

Method Blank	**097-01-002-18465**	**N/A**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 19:16**	**140609L08**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0385-1	**Sample**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 19:23**	**140609S08**
14-06-0385-1	**Matrix Spike**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 19:24**	**140609S08**
14-06-0385-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 19:25**	**140609S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.9910	25.00	25.90	100	25.91	100	75-125	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/13/14
121 Innovation Drive, Suite 200		Work Order:	14-05-0986
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18465	**LCS**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 19:21**	**140609L08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	25.00	24.47	98	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-05-0986

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1

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Glossary of Terms and Qualifiers

Work Order: 14-05-0986

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Friday, June 06, 2014 5:04 PM
To: Stephen Nowak
Subject: RE: Pechiney / 0106270030 / CEL 14-05-0986

Please analyze sample 801-IV-P/S-SS-001 for Arsenic on a standard TAT. Thanks.

Kim

From: Stephen Nowak [mailto:snowak@calscience.com]
Sent: Thursday, May 15, 2014 5:42 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Pechiney / 0106270030 / CEL 14-05-0986

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com

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CHAIN-OF-CUSTODY RECORD

NB 31331

PROJECT NAME: Pechiney

DATE: 5-13-14 | PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

14-05-0986

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

GEOTRACKER REQUIRED YES NO

LABORATORY PHONE NUMBER:

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-13-14	0715	624-IIB-P/S-CS-001	X			4 oz glass jar	O			X		1	concrete
2		0719	624-IIB-P/S-CS-002	X				O			X		1	concrete
3		0915	849-IV-P/S-SS-001	X	X	X		S			X		1	
4		0921	849-IV-P/S-SS-002	X	X	X		S			X		1	
5		0926	801-IV-P/S-SS-001	X				S			X		1	
6		0940	#1018	X	X			S			X		1	
7		1330	DC-425	X				O			X		1	concrete

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	5/13/14	14:00	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/13/14	14:00
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/13/14	15:45	SIGNATURE: PRINTED NAME: D. Irawan COMPANY: CEL	5/13/14	15.45
SIGNATURE: PRINTED NAME: D. Irawan COMPANY: CEL	5/13/14	17.20	SIGNATURE: PRINTED NAME: Yan Lian COMPANY: CEL	5/13/14	17:20

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-0986

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/13/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.0 °C - 0.3 °C (CF) = 2.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 896

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 896

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 689

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 689

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-1098

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/19/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-05-1098

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-1098 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/14/14. They were assigned to Work Order 14-05-1098.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1098
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	05/14/14 17:16
		Number of Containers:	17
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
293-IV-P/S-O-004	14-05-1098-1	05/14/14 08:13	1	Other
#1019	14-05-1098-2	05/14/14 10:12	1	Solid
#1020	14-05-1098-3	05/14/14 10:14	1	Solid
#1021	14-05-1098-4	05/14/14 10:15	1	Solid
#1022	14-05-1098-5	05/14/14 10:16	1	Solid
#1023	14-05-1098-6	05/14/14 10:17	1	Solid
#1024	14-05-1098-7	05/14/14 10:18	1	Solid
#1025	14-05-1098-8	05/14/14 10:18	1	Solid
#1026	14-05-1098-9	05/14/14 10:19	1	Solid
#1027	14-05-1098-10	05/14/14 10:19	1	Solid
#1028	14-05-1098-11	05/14/14 13:29	1	Solid
#1029	14-05-1098-12	05/14/14 13:31	1	Solid
#1030	14-05-1098-13	05/14/14 13:32	1	Solid
#1031	14-05-1098-14	05/14/14 13:35	1	Solid
#1032	14-05-1098-15	05/14/14 13:38	1	Solid
#1033	14-05-1098-16	05/14/14 13:41	1	Solid
#1034	14-05-1098-17	05/14/14 13:42	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1098
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/14/14
Attn:	Linda Conlan		Page 1 of 2

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
293-IV-P/S-O-004 (14-05-1098-1)						
Aroclor-1248	6800		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	510		50	ug/kg	EPA 8082	EPA 3540C
#1019 (14-05-1098-2)						
Aroclor-1248	4900		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	810		50	ug/kg	EPA 8082	EPA 3540C
#1020 (14-05-1098-3)						
Aroclor-1248	310		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	63		50	ug/kg	EPA 8082	EPA 3540C
#1021 (14-05-1098-4)						
Aroclor-1248	190		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	63		50	ug/kg	EPA 8082	EPA 3540C
#1022 (14-05-1098-5)						
Aroclor-1248	95		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	51		50	ug/kg	EPA 8082	EPA 3540C
#1023 (14-05-1098-6)						
Aroclor-1248	410		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	68		50	ug/kg	EPA 8082	EPA 3540C
#1024 (14-05-1098-7)						
Aroclor-1248	100		50	ug/kg	EPA 8082	EPA 3540C
#1025 (14-05-1098-8)						
Aroclor-1248	7300		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2000		500	ug/kg	EPA 8082	EPA 3540C
#1026 (14-05-1098-9)						
Aroclor-1248	3100		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	440		50	ug/kg	EPA 8082	EPA 3540C
#1027 (14-05-1098-10)						
Aroclor-1248	1700		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	200		50	ug/kg	EPA 8082	EPA 3540C
#1028 (14-05-1098-11)						
Aroclor-1268	56		50	ug/kg	EPA 8082	EPA 3540C
#1029 (14-05-1098-12)						
Aroclor-1268	88		50	ug/kg	EPA 8082	EPA 3540C
#1031 (14-05-1098-14)						
Aroclor-1248	150		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	110		50	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1098
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/14/14
Attn:	Linda Conlan		Page 2 of 2

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1032 (14-05-1098-15)						
Aroclor-1248	1700		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	190		50	ug/kg	EPA 8082	EPA 3540C
#1033 (14-05-1098-16)						
C9-C10	870		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	130		50	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	85		50	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	180		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	350		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	600		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	760		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	470		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	470		50	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	300		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	4300		50	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	150		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	400		50	ug/kg	EPA 8082	EPA 3540C
#1034 (14-05-1098-17)						
C9-C10	500		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	46		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	4.9		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	11		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	35		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	38		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	34		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	50		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	140		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	94		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	73		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	74		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1100		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	250		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	85		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1033	**14-05-1098-16-A**	**05/14/14 13:41**	**Solid**	**GC 47**	**05/15/14**	**05/16/14 13:19**	**140515B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	ND	50	10.0	
C9-C10	870	50	10.0	
C11-C12	130	50	10.0	
C13-C14	ND	50	10.0	
C15-C16	ND	50	10.0	
C17-C18	ND	50	10.0	
C19-C20	85	50	10.0	
C21-C22	180	50	10.0	
C23-C24	350	50	10.0	
C25-C28	600	50	10.0	
C29-C32	760	50	10.0	
C33-C36	470	50	10.0	
C37-C40	470	50	10.0	
C41-C44	300	50	10.0	
C6-C44 Total	4300	50	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	115	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1034	**14-05-1098-17-A**	**05/14/14 13:42**	**Solid**	**GC 45**	**05/15/14**	**05/15/14 15:10**	**140515B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	500	4.9	0.980	
C11-C12	46	4.9	0.980	
C13-C14	4.9	4.9	0.980	
C15-C16	ND	4.9	0.980	
C17-C18	11	4.9	0.980	
C19-C20	35	4.9	0.980	
C21-C22	38	4.9	0.980	
C23-C24	34	4.9	0.980	
C25-C28	50	4.9	0.980	
C29-C32	140	4.9	0.980	
C33-C36	94	4.9	0.980	
C37-C40	73	4.9	0.980	
C41-C44	74	4.9	0.980	
C6-C44 Total	1100	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	82	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-903**	**N/A**	**Solid**	**GC 45**	**05/15/14**	**05/15/14 13:41**	**140515B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	84	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IV-P/S-O-004	**14-05-1098-1-A**	**05/14/14 08:13**	**Other**	**GC 31**	**05/14/14**	**05/15/14 23:58**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	510	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

293-IV-P/S-O-004	**14-05-1098-1-A**	**05/14/14 08:13**	**Other**	**GC 31**	**05/14/14**	**05/16/14 15:45**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	6800	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1019	**14-05-1098-2-A**	**05/14/14 10:12**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 00:17**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	810	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#1019	**14-05-1098-2-A**	**05/14/14 10:12**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 16:04**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4900	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1020	**14-05-1098-3-A**	**05/14/14 10:14**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 00:36**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	310	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	63	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

#1021	**14-05-1098-4-A**	**05/14/14 10:15**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 00:55**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	190	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	63	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1022	**14-05-1098-5-A**	**05/14/14 10:16**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 01:14**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	95	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	51	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

#1023	**14-05-1098-6-A**	**05/14/14 10:17**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 01:33**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	410	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	68	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1024	**14-05-1098-7-A**	**05/14/14 10:18**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 01:52**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	100	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

#1025	**14-05-1098-8-A**	**05/14/14 10:18**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 02:11**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	141	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1025	**14-05-1098-8-A**	**05/14/14 10:18**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 16:24**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	7300	500	10.0	
Aroclor-1260	2000	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	142	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

#1026	**14-05-1098-9-A**	**05/14/14 10:19**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 02:30**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	440	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

#1026	**14-05-1098-9-A**	**05/14/14 10:19**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 17:02**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3100	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1027	**14-05-1098-10-A**	**05/14/14 10:19**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 02:49**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	200	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	206	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

#1027	**14-05-1098-10-A**	**05/14/14 10:19**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 17:21**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1700	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	193	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1028	**14-05-1098-11-A**	**05/14/14 13:29**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 03:08**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	56	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

#1029	**14-05-1098-12-A**	**05/14/14 13:31**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 03:27**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	88	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1030	**14-05-1098-13-A**	**05/14/14 13:32**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 03:47**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

#1031	**14-05-1098-14-A**	**05/14/14 13:35**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 04:06**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	150	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	110	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1032	**14-05-1098-15-A**	**05/14/14 13:38**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 04:25**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	190	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#1032	**14-05-1098-15-A**	**05/14/14 13:38**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 17:40**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1700	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 11 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1033	**14-05-1098-16-A**	**05/14/14 13:41**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 04:44**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	150	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	400	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

#1034	**14-05-1098-17-A**	**05/14/14 13:42**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 05:03**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	250	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	85	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 12 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-249**	**N/A**	**Solid**	**GC 31**	**05/14/14**	**05/15/14 23:20**	**140514L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1033	**14-05-1098-16-A**	**05/14/14 13:41**	**Solid**	**GC/MS Q**	**05/14/14**	**05/15/14 17:04**	**140515L016**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	26000	100	
Benzene	ND	1000	100	
Bromobenzene	ND	1000	100	
Bromochloromethane	ND	1000	100	
Bromodichloromethane	ND	1000	100	
Bromoform	ND	1000	100	
Bromomethane	ND	5100	100	
2-Butanone	ND	10000	100	
n-Butylbenzene	ND	1000	100	
sec-Butylbenzene	ND	1000	100	
tert-Butylbenzene	ND	1000	100	
Carbon Disulfide	ND	10000	100	
Carbon Tetrachloride	ND	1000	100	
Chlorobenzene	ND	1000	100	
Chloroethane	ND	1000	100	
Chloroform	ND	1000	100	
Chloromethane	ND	5100	100	
2-Chlorotoluene	ND	1000	100	
4-Chlorotoluene	ND	1000	100	
Dibromochloromethane	ND	1000	100	
1,2-Dibromo-3-Chloropropane	ND	2000	100	
1,2-Dibromoethane	ND	1000	100	
Dibromomethane	ND	1000	100	
1,2-Dichlorobenzene	ND	1000	100	
1,3-Dichlorobenzene	ND	1000	100	
1,4-Dichlorobenzene	ND	1000	100	
Dichlorodifluoromethane	ND	1000	100	
1,1-Dichloroethane	ND	1000	100	
1,2-Dichloroethane	ND	1000	100	
1,1-Dichloroethene	ND	1000	100	
c-1,2-Dichloroethene	ND	1000	100	
t-1,2-Dichloroethene	ND	1000	100	
1,2-Dichloropropane	ND	1000	100	
1,3-Dichloropropane	ND	1000	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	05/14/14
121 Innovation Drive, Suite 200	Work Order:	14-05-1098
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
2,2-Dichloropropane	ND	1000	100	
1,1-Dichloropropene	ND	1000	100	
c-1,3-Dichloropropene	ND	1000	100	
t-1,3-Dichloropropene	ND	1000	100	
Ethylbenzene	ND	1000	100	
2-Hexanone	ND	10000	100	
Isopropylbenzene	ND	1000	100	
p-Isopropyltoluene	ND	1000	100	
Methylene Chloride	ND	10000	100	
4-Methyl-2-Pentanone	ND	10000	100	
Naphthalene	ND	10000	100	
n-Propylbenzene	ND	1000	100	
Styrene	ND	1000	100	
1,1,1,2-Tetrachloroethane	ND	1000	100	
1,1,2,2-Tetrachloroethane	ND	1000	100	
Tetrachloroethene	ND	1000	100	
Toluene	ND	1000	100	
1,2,3-Trichlorobenzene	ND	2000	100	
1,2,4-Trichlorobenzene	ND	1000	100	
1,1,1-Trichloroethane	ND	1000	100	
1,1,2-Trichloroethane	ND	1000	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10000	100	
Trichloroethene	ND	1000	100	
1,2,3-Trichloropropane	ND	1000	100	
1,2,4-Trimethylbenzene	ND	1000	100	
Trichlorofluoromethane	ND	10000	100	
1,3,5-Trimethylbenzene	ND	1000	100	
Vinyl Acetate	ND	10000	100	
Vinyl Chloride	ND	1000	100	
p/m-Xylene	ND	1000	100	
o-Xylene	ND	1000	100	
Methyl-t-Butyl Ether (MTBE)	ND	1000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	104	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1034	**14-05-1098-17-A**	**05/14/14 13:42**	**Solid**	**GC/MS Q**	**05/14/14**	**05/15/14 17:30**	**140515L016**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	24000	100	
Benzene	ND	970	100	
Bromobenzene	ND	970	100	
Bromochloromethane	ND	970	100	
Bromodichloromethane	ND	970	100	
Bromoform	ND	970	100	
Bromomethane	ND	4900	100	
2-Butanone	ND	9700	100	
n-Butylbenzene	ND	970	100	
sec-Butylbenzene	ND	970	100	
tert-Butylbenzene	ND	970	100	
Carbon Disulfide	ND	9700	100	
Carbon Tetrachloride	ND	970	100	
Chlorobenzene	ND	970	100	
Chloroethane	ND	970	100	
Chloroform	ND	970	100	
Chloromethane	ND	4900	100	
2-Chlorotoluene	ND	970	100	
4-Chlorotoluene	ND	970	100	
Dibromochloromethane	ND	970	100	
1,2-Dibromo-3-Chloropropane	ND	1900	100	
1,2-Dibromoethane	ND	970	100	
Dibromomethane	ND	970	100	
1,2-Dichlorobenzene	ND	970	100	
1,3-Dichlorobenzene	ND	970	100	
1,4-Dichlorobenzene	ND	970	100	
Dichlorodifluoromethane	ND	970	100	
1,1-Dichloroethane	ND	970	100	
1,2-Dichloroethane	ND	970	100	
1,1-Dichloroethene	ND	970	100	
c-1,2-Dichloroethene	ND	970	100	
t-1,2-Dichloroethene	ND	970	100	
1,2-Dichloropropane	ND	970	100	
1,3-Dichloropropane	ND	970	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	05/14/14
121 Innovation Drive, Suite 200	Work Order:	14-05-1098
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
2,2-Dichloropropane	ND	970	100	
1,1-Dichloropropene	ND	970	100	
c-1,3-Dichloropropene	ND	970	100	
t-1,3-Dichloropropene	ND	970	100	
Ethylbenzene	ND	970	100	
2-Hexanone	ND	9700	100	
Isopropylbenzene	ND	970	100	
p-Isopropyltoluene	ND	970	100	
Methylene Chloride	ND	9700	100	
4-Methyl-2-Pentanone	ND	9700	100	
Naphthalene	ND	9700	100	
n-Propylbenzene	ND	970	100	
Styrene	ND	970	100	
1,1,1,2-Tetrachloroethane	ND	970	100	
1,1,2,2-Tetrachloroethane	ND	970	100	
Tetrachloroethene	ND	970	100	
Toluene	ND	970	100	
1,2,3-Trichlorobenzene	ND	1900	100	
1,2,4-Trichlorobenzene	ND	970	100	
1,1,1-Trichloroethane	ND	970	100	
1,1,2-Trichloroethane	ND	970	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9700	100	
Trichloroethene	ND	970	100	
1,2,3-Trichloropropane	ND	970	100	
1,2,4-Trimethylbenzene	ND	970	100	
Trichlorofluoromethane	ND	9700	100	
1,3,5-Trimethylbenzene	ND	970	100	
Vinyl Acetate	ND	9700	100	
Vinyl Chloride	ND	970	100	
p/m-Xylene	ND	970	100	
o-Xylene	ND	970	100	
Methyl-t-Butyl Ether (MTBE)	ND	970	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8484**	**N/A**	**Solid**	**GC/MS Q**	**05/15/14**	**05/15/14 15:19**	**140515L016**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	500	50.0	
Bromobenzene	ND	500	50.0	
Bromochloromethane	ND	500	50.0	
Bromodichloromethane	ND	500	50.0	
Bromoform	ND	500	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	5000	50.0	
n-Butylbenzene	ND	500	50.0	
sec-Butylbenzene	ND	500	50.0	
tert-Butylbenzene	ND	500	50.0	
Carbon Disulfide	ND	5000	50.0	
Carbon Tetrachloride	ND	500	50.0	
Chlorobenzene	ND	500	50.0	
Chloroethane	ND	500	50.0	
Chloroform	ND	500	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	500	50.0	
4-Chlorotoluene	ND	500	50.0	
Dibromochloromethane	ND	500	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	500	50.0	
Dibromomethane	ND	500	50.0	
1,2-Dichlorobenzene	ND	500	50.0	
1,3-Dichlorobenzene	ND	500	50.0	
1,4-Dichlorobenzene	ND	500	50.0	
Dichlorodifluoromethane	ND	500	50.0	
1,1-Dichloroethane	ND	500	50.0	
1,2-Dichloroethane	ND	500	50.0	
1,1-Dichloroethene	ND	500	50.0	
c-1,2-Dichloroethene	ND	500	50.0	
t-1,2-Dichloroethene	ND	500	50.0	
1,2-Dichloropropane	ND	500	50.0	
1,3-Dichloropropane	ND	500	50.0	
2,2-Dichloropropane	ND	500	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	05/14/14
121 Innovation Drive, Suite 200	Work Order:	14-05-1098
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	50.0	
c-1,3-Dichloropropene	ND	500	50.0	
t-1,3-Dichloropropene	ND	500	50.0	
Ethylbenzene	ND	500	50.0	
2-Hexanone	ND	5000	50.0	
Isopropylbenzene	ND	500	50.0	
p-Isopropyltoluene	ND	500	50.0	
Methylene Chloride	ND	5000	50.0	
4-Methyl-2-Pentanone	ND	5000	50.0	
Naphthalene	ND	5000	50.0	
n-Propylbenzene	ND	500	50.0	
Styrene	ND	500	50.0	
1,1,1,2-Tetrachloroethane	ND	500	50.0	
1,1,2,2-Tetrachloroethane	ND	500	50.0	
Tetrachloroethene	ND	500	50.0	
Toluene	ND	500	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	500	50.0	
1,1,1-Trichloroethane	ND	500	50.0	
1,1,2-Trichloroethane	ND	500	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	50.0	
Trichloroethene	ND	500	50.0	
1,2,3-Trichloropropane	ND	500	50.0	
1,2,4-Trimethylbenzene	ND	500	50.0	
Trichlorofluoromethane	ND	5000	50.0	
1,3,5-Trimethylbenzene	ND	500	50.0	
Vinyl Acetate	ND	5000	50.0	
Vinyl Chloride	ND	500	50.0	
p/m-Xylene	ND	500	50.0	
o-Xylene	ND	500	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1034	**Sample**	**Solid**	**GC 45**	**05/15/14**	**05/15/14 15:10**	**140515S01**
#1034	**Matrix Spike**	**Solid**	**GC 45**	**05/15/14**	**05/15/14 14:18**	**140515S01**
#1034	**Matrix Spike Duplicate**	**Solid**	**GC 45**	**05/15/14**	**05/15/14 14:35**	**140515S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	1129	400.0	1790	165	1777	162	64-130	1	0-15	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1022	**Sample**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 01:14**	**140514S20**
#1022	**Matrix Spike**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 05:22**	**140514S20**
#1022	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**05/14/14**	**05/16/14 05:41**	**140514S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	120.9	121	121.1	121	50-135	0	0-25	
Aroclor-1260	51.37	100.0	139.4	88	141.2	90	50-135	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0997-11	**Sample**	**Solid**	**GC/MS Q**	**05/14/14**	**05/15/14 15:45**	**140515S003**
14-05-0997-11	**Matrix Spike**	**Solid**	**GC/MS Q**	**05/14/14**	**05/15/14 17:57**	**140515S003**
14-05-0997-11	**Matrix Spike Duplicate**	**Solid**	**GC/MS Q**	**05/14/14**	**05/15/14 18:23**	**140515S003**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	45.90	92	44.53	89	61-127	3	0-20	
Carbon Tetrachloride	ND	50.00	43.98	88	44.61	89	51-135	1	0-29	
Chlorobenzene	ND	50.00	47.48	95	46.25	92	57-123	3	0-20	
1,2-Dibromoethane	ND	50.00	46.50	93	46.18	92	64-124	1	0-20	
1,2-Dichlorobenzene	ND	50.00	45.82	92	45.26	91	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	45.49	91	44.88	90	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	48.46	97	48.84	98	47-143	1	0-25	
Ethylbenzene	ND	50.00	46.56	93	45.04	90	57-129	3	0-22	
Toluene	ND	50.00	47.33	95	46.06	92	63-123	3	0-20	
Trichloroethene	ND	50.00	47.37	95	45.72	91	44-158	4	0-20	
Vinyl Chloride	ND	50.00	42.15	84	39.90	80	49-139	5	0-47	
p/m-Xylene	ND	100.0	94.70	95	89.71	90	70-130	5	0-30	
o-Xylene	ND	50.00	48.44	97	46.11	92	70-130	5	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	47.84	96	46.90	94	57-123	2	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-903	**LCS**	**Solid**	**GC 45**	**05/15/14**	**05/15/14 13:59**	**140515B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	422.5	106	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-249	**LCS**	**Solid**	**GC 31**	**05/14/14**	**05/15/14 23:01**	**140514L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	99.20	99	50-135	
Aroclor-1260	100.0	93.66	94	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8484	**LCS**	**Solid**	**GC/MS Q**	**05/15/14**	**05/15/14 13:55**	**140515L016**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	50.37	101	78-120	71-127	
Carbon Tetrachloride	50.00	52.86	106	49-139	34-154	
Chlorobenzene	50.00	53.57	107	79-120	72-127	
1,2-Dibromoethane	50.00	51.76	104	80-120	73-127	
1,2-Dichlorobenzene	50.00	51.79	104	75-120	68-128	
1,2-Dichloroethane	50.00	49.54	99	80-120	73-127	
1,1-Dichloroethene	50.00	55.00	110	74-122	66-130	
Ethylbenzene	50.00	52.09	104	76-120	69-127	
Toluene	50.00	51.91	104	77-120	70-127	
Trichloroethene	50.00	50.71	101	80-120	73-127	
Vinyl Chloride	50.00	47.56	95	68-122	59-131	
p/m-Xylene	100.0	103.8	104	75-125	67-133	
o-Xylene	50.00	53.36	107	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	51.03	102	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-1098

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	682	GC 45	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	823	GC/MS Q	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-1098

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 27491

PROJECT NAME: FORMER PENTINEY CAST PLATE FACILITY

PROJECT NUMBER: 0106270030

RESULTS TO: L. Conlan

TURNAROUND TIME: 48-HR

SAMPLE SHIPMENT METHOD: Lab Courier

LABORATORY NAME: CalScience

LABORATORY ADDRESS:

LABORATORY CONTACT: Stephen Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

DATE: 5/14/14 PAGE 1 OF 2

REPORTING REQUIREMENTS:

14-05-1098

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Stephen Hwang, Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	RCS-FM8082	EPA 8015	EPA 8260	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5/14/14	0813	213-IV-P/S-0-004	X			4 oz glass	O		None	X		1	Pea gravel
2		1012	#1019	X				S			X		1	
3		1014	#1020	X				S			X		1	
4		1015	#1021	X				S			X		1	
5		1016	#1022	X				S			X		1	
6		1017	#1023	X				S			X		1	
7		1018	#1024	X				S			X		1	
8		1018	#1025	X				S			X		1	
9		1019	#1026	X				S			X		1	
10		1019	#1027	X				S			X		1	
11		1329	#1028	X				S			X		1	
12		1331	#1029	X				S			X		1	
13		1332	#1030	X				S			X		1	
14		1335	#1031	X				S			X		1	
15		1338	#1032	X				S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	5/14/14	1307	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/14/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/14/14	1507	SIGNATURE: PRINTED NAME: Adam Robson COMPANY: CEC	5/14/14	1507
SIGNATURE: PRINTED NAME: COMPANY: CEC	5/14/14	1716	SIGNATURE: PRINTED NAME: Noel Cruz COMPANY: CEC	05/14/14	1716

TOTAL NUMBER OF CONTAINERS: 15/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 31332

PROJECT NAME: Pechiney

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: CalScience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

DATE: 5-14-14

PAGE 2 OF 2

REPORTING REQUIREMENTS: 1098

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	EPA 8260	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	5-14-14	1341	#1033	X	X	X	4 oz glass jar	S		None	X		1	
17	↓	1342	#1034	X	X	X	↓	S		↓	X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	5/14/14	1400	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	5/14/14	1400
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	5/14/14	1507	SIGNATURE: PRINTED NAME: Adam Ortson COMPANY: CEL	5/14/14	1507
SIGNATURE: PRINTED NAME: Adam Ortson COMPANY: CEL	5/14/14	1716	SIGNATURE: PRINTED NAME: Noel Conn COMPANY: CEL	5/14/14	1716

TOTAL NUMBER OF CONTAINERS: 2/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1 0 9 6

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/14/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.8 °C - 0.3 °C (CF) = 3.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☑ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 689

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 689

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-05-1098

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/21/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-05-1098

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-1098 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/14/14. They were assigned to Work Order 14-05-1098.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1098
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	05/14/14 17:16
		Number of Containers:	17
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1028	14-05-1098-11	05/14/14 13:29	1	Solid
#1029	14-05-1098-12	05/14/14 13:31	1	Solid
#1030	14-05-1098-13	05/14/14 13:32	1	Solid
#1031	14-05-1098-14	05/14/14 13:35	1	Solid
#1032	14-05-1098-15	05/14/14 13:38	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1098
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/14/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1028 (14-05-1098-11)						
C9-C10	170		74	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	130		74	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	200		74	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	670		74	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	620		74	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	340		74	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2300		74	mg/kg	EPA 8015B (M)	EPA 3550B
#1029 (14-05-1098-12)						
C9-C10	550		74	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	200		74	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	490		74	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	780		74	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	2700		74	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	2300		74	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	1100		74	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	300		74	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	8500		74	mg/kg	EPA 8015B (M)	EPA 3550B
#1030 (14-05-1098-13)						
C9-C10	340		120	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	120		120	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	340		120	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	630		120	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	2000		120	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	2000		120	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	1000		120	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	290		120	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	6800		120	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1098
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/14/14
Attn:	Linda Conlan		Page 2 of 2

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1031 (14-05-1098-14)						
C9-C10	330		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	45		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	8.6		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	8.9		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	29		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	46		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	65		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	120		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	160		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	220		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	180		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	170		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	83		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1500		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
#1032 (14-05-1098-15)						
C9-C10	340		74	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	210		74	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	88		74	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	99		74	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	85		74	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1000		74	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1028	**14-05-1098-11-A**	**05/14/14 13:29**	**Solid**	**GC 49**	**05/20/14**	**05/21/14 03:12**	**140520B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	74	14.9	
C7	ND	74	14.9	
C8	ND	74	14.9	
C9-C10	170	74	14.9	
C11-C12	ND	74	14.9	
C13-C14	ND	74	14.9	
C15-C16	ND	74	14.9	
C17-C18	ND	74	14.9	
C19-C20	ND	74	14.9	
C21-C22	ND	74	14.9	
C23-C24	130	74	14.9	
C25-C28	200	74	14.9	
C29-C32	670	74	14.9	
C33-C36	620	74	14.9	
C37-C40	340	74	14.9	
C41-C44	ND	74	14.9	
C6-C44 Total	2300	74	14.9	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	143	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1029	**14-05-1098-12-A**	**05/14/14 13:31**	**Solid**	**GC 49**	**05/20/14**	**05/21/14 03:29**	**140520B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	74	14.9	
C7	ND	74	14.9	
C8	ND	74	14.9	
C9-C10	550	74	14.9	
C11-C12	ND	74	14.9	
C13-C14	ND	74	14.9	
C15-C16	ND	74	14.9	
C17-C18	ND	74	14.9	
C19-C20	ND	74	14.9	
C21-C22	200	74	14.9	
C23-C24	490	74	14.9	
C25-C28	780	74	14.9	
C29-C32	2700	74	14.9	
C33-C36	2300	74	14.9	
C37-C40	1100	74	14.9	
C41-C44	300	74	14.9	
C6-C44 Total	8500	74	14.9	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	116	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1030	**14-05-1098-13-A**	**05/14/14 13:32**	**Solid**	**GC 49**	**05/20/14**	**05/21/14 03:46**	**140520B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	120	24.5	
C7	ND	120	24.5	
C8	ND	120	24.5	
C9-C10	340	120	24.5	
C11-C12	ND	120	24.5	
C13-C14	ND	120	24.5	
C15-C16	ND	120	24.5	
C17-C18	ND	120	24.5	
C19-C20	ND	120	24.5	
C21-C22	120	120	24.5	
C23-C24	340	120	24.5	
C25-C28	630	120	24.5	
C29-C32	2000	120	24.5	
C33-C36	2000	120	24.5	
C37-C40	1000	120	24.5	
C41-C44	290	120	24.5	
C6-C44 Total	6800	120	24.5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	125	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1031	**14-05-1098-14-A**	**05/14/14 13:35**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 18:40**	**140520B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	0.980	
C7	ND	4.9	0.980	
C8	ND	4.9	0.980	
C9-C10	330	4.9	0.980	
C11-C12	45	4.9	0.980	
C13-C14	8.6	4.9	0.980	
C15-C16	8.9	4.9	0.980	
C17-C18	29	4.9	0.980	
C19-C20	46	4.9	0.980	
C21-C22	65	4.9	0.980	
C23-C24	120	4.9	0.980	
C25-C28	160	4.9	0.980	
C29-C32	220	4.9	0.980	
C33-C36	180	4.9	0.980	
C37-C40	170	4.9	0.980	
C41-C44	83	4.9	0.980	
C6-C44 Total	1500	4.9	0.980	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	127	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1032	**14-05-1098-15-A**	**05/14/14 13:38**	**Solid**	**GC 49**	**05/20/14**	**05/21/14 04:18**	**140520B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	74	14.9	
C7	ND	74	14.9	
C8	ND	74	14.9	
C9-C10	340	74	14.9	
C11-C12	ND	74	14.9	
C13-C14	ND	74	14.9	
C15-C16	ND	74	14.9	
C17-C18	ND	74	14.9	
C19-C20	ND	74	14.9	
C21-C22	ND	74	14.9	
C23-C24	ND	74	14.9	
C25-C28	210	74	14.9	
C29-C32	88	74	14.9	
C33-C36	99	74	14.9	
C37-C40	85	74	14.9	
C41-C44	ND	74	14.9	
C6-C44 Total	1000	74	14.9	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	132	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-913**	**N/A**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 11:27**	**140520B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1032	**14-05-1098-15-A**	**05/14/14 13:38**	**Solid**	**GC/MS XX**	**05/20/14**	**05/20/14 16:03**	**140520L025**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	25000	100	
Benzene	ND	1000	100	
Bromobenzene	ND	1000	100	
Bromochloromethane	ND	1000	100	
Bromodichloromethane	ND	1000	100	
Bromoform	ND	1000	100	
Bromomethane	ND	5000	100	
2-Butanone	ND	10000	100	
n-Butylbenzene	ND	1000	100	
sec-Butylbenzene	ND	1000	100	
tert-Butylbenzene	ND	1000	100	
Carbon Disulfide	ND	10000	100	
Carbon Tetrachloride	ND	1000	100	
Chlorobenzene	ND	1000	100	
Chloroethane	ND	1000	100	
Chloroform	ND	1000	100	
Chloromethane	ND	5000	100	
2-Chlorotoluene	ND	1000	100	
4-Chlorotoluene	ND	1000	100	
Dibromochloromethane	ND	1000	100	
1,2-Dibromo-3-Chloropropane	ND	2000	100	
1,2-Dibromoethane	ND	1000	100	
Dibromomethane	ND	1000	100	
1,2-Dichlorobenzene	ND	1000	100	
1,3-Dichlorobenzene	ND	1000	100	
1,4-Dichlorobenzene	ND	1000	100	
Dichlorodifluoromethane	ND	1000	100	
1,1-Dichloroethane	ND	1000	100	
1,2-Dichloroethane	ND	1000	100	
1,1-Dichloroethene	ND	1000	100	
c-1,2-Dichloroethene	ND	1000	100	
t-1,2-Dichloroethene	ND	1000	100	
1,2-Dichloropropane	ND	1000	100	
1,3-Dichloropropane	ND	1000	100	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	05/14/14
121 Innovation Drive, Suite 200	Work Order:	14-05-1098
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
2,2-Dichloropropane	ND	1000	100	
1,1-Dichloropropene	ND	1000	100	
c-1,3-Dichloropropene	ND	1000	100	
t-1,3-Dichloropropene	ND	1000	100	
Ethylbenzene	ND	1000	100	
2-Hexanone	ND	10000	100	
Isopropylbenzene	ND	1000	100	
p-Isopropyltoluene	ND	1000	100	
Methylene Chloride	ND	10000	100	
4-Methyl-2-Pentanone	ND	10000	100	
Naphthalene	ND	10000	100	
n-Propylbenzene	ND	1000	100	
Styrene	ND	1000	100	
1,1,1,2-Tetrachloroethane	ND	1000	100	
1,1,2,2-Tetrachloroethane	ND	1000	100	
Tetrachloroethene	ND	1000	100	
Toluene	ND	1000	100	
1,2,3-Trichlorobenzene	ND	2000	100	
1,2,4-Trichlorobenzene	ND	1000	100	
1,1,1-Trichloroethane	ND	1000	100	
1,1,2-Trichloroethane	ND	1000	100	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10000	100	
Trichloroethene	ND	1000	100	
1,2,3-Trichloropropane	ND	1000	100	
1,2,4-Trimethylbenzene	ND	1000	100	
Trichlorofluoromethane	ND	10000	100	
1,3,5-Trimethylbenzene	ND	1000	100	
Vinyl Acetate	ND	10000	100	
Vinyl Chloride	ND	1000	100	
p/m-Xylene	ND	1000	100	
o-Xylene	ND	1000	100	
Methyl-t-Butyl Ether (MTBE)	ND	1000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	60-132	
Dibromofluoromethane	93	63-141	
1,2-Dichloroethane-d4	98	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8495**	**N/A**	**Solid**	**GC/MS XX**	**05/20/14**	**05/20/14 11:50**	**140520L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	500	50.0	
Bromobenzene	ND	500	50.0	
Bromochloromethane	ND	500	50.0	
Bromodichloromethane	ND	500	50.0	
Bromoform	ND	500	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	5000	50.0	
n-Butylbenzene	ND	500	50.0	
sec-Butylbenzene	ND	500	50.0	
tert-Butylbenzene	ND	500	50.0	
Carbon Disulfide	ND	5000	50.0	
Carbon Tetrachloride	ND	500	50.0	
Chlorobenzene	ND	500	50.0	
Chloroethane	ND	500	50.0	
Chloroform	ND	500	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	500	50.0	
4-Chlorotoluene	ND	500	50.0	
Dibromochloromethane	ND	500	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	500	50.0	
Dibromomethane	ND	500	50.0	
1,2-Dichlorobenzene	ND	500	50.0	
1,3-Dichlorobenzene	ND	500	50.0	
1,4-Dichlorobenzene	ND	500	50.0	
Dichlorodifluoromethane	ND	500	50.0	
1,1-Dichloroethane	ND	500	50.0	
1,2-Dichloroethane	ND	500	50.0	
1,1-Dichloroethene	ND	500	50.0	
c-1,2-Dichloroethene	ND	500	50.0	
t-1,2-Dichloroethene	ND	500	50.0	
1,2-Dichloropropane	ND	500	50.0	
1,3-Dichloropropane	ND	500	50.0	
2,2-Dichloropropane	ND	500	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	05/14/14
121 Innovation Drive, Suite 200	Work Order:	14-05-1098
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg

Project: Former Pechiney Cast Plate Facility / 0106270030

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	50.0	
c-1,3-Dichloropropene	ND	500	50.0	
t-1,3-Dichloropropene	ND	500	50.0	
Ethylbenzene	ND	500	50.0	
2-Hexanone	ND	5000	50.0	
Isopropylbenzene	ND	500	50.0	
p-Isopropyltoluene	ND	500	50.0	
Methylene Chloride	ND	5000	50.0	
4-Methyl-2-Pentanone	ND	5000	50.0	
Naphthalene	ND	5000	50.0	
n-Propylbenzene	ND	500	50.0	
Styrene	ND	500	50.0	
1,1,1,2-Tetrachloroethane	ND	500	50.0	
1,1,2,2-Tetrachloroethane	ND	500	50.0	
Tetrachloroethene	ND	500	50.0	
Toluene	ND	500	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	500	50.0	
1,1,1-Trichloroethane	ND	500	50.0	
1,1,2-Trichloroethane	ND	500	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	50.0	
Trichloroethene	ND	500	50.0	
1,2,3-Trichloropropane	ND	500	50.0	
1,2,4-Trimethylbenzene	ND	500	50.0	
Trichlorofluoromethane	ND	5000	50.0	
1,3,5-Trimethylbenzene	ND	500	50.0	
Vinyl Acetate	ND	5000	50.0	
Vinyl Chloride	ND	500	50.0	
p/m-Xylene	ND	500	50.0	
o-Xylene	ND	500	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	60-132	
Dibromofluoromethane	98	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1063-12	**Sample**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 16:59**	**140520S02**
14-05-1063-12	**Matrix Spike**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 11:59**	**140520S02**
14-05-1063-12	**Matrix Spike Duplicate**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 12:15**	**140520S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	427.2	107	412.2	103	64-130	4	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1323-9	**Sample**	**Solid**	**GC/MS XX**	**05/16/14**	**05/20/14 12:46**	**140520S005**
14-05-1323-9	**Matrix Spike**	**Solid**	**GC/MS XX**	**05/16/14**	**05/20/14 14:10**	**140520S005**
14-05-1323-9	**Matrix Spike Duplicate**	**Solid**	**GC/MS XX**	**05/16/14**	**05/20/14 14:39**	**140520S005**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	46.68	93	46.38	93	61-127	1	0-20	
Carbon Tetrachloride	ND	50.00	47.60	95	46.87	94	51-135	2	0-29	
Chlorobenzene	ND	50.00	47.96	96	48.22	96	57-123	1	0-20	
1,2-Dibromoethane	ND	50.00	51.14	102	50.66	101	64-124	1	0-20	
1,2-Dichlorobenzene	ND	50.00	49.71	99	50.08	100	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	48.76	98	48.21	96	80-120	1	0-20	
1,1-Dichloroethene	ND	50.00	44.92	90	43.73	87	47-143	3	0-25	
Ethylbenzene	ND	50.00	48.06	96	48.00	96	57-129	0	0-22	
Toluene	ND	50.00	47.27	95	47.63	95	63-123	1	0-20	
Trichloroethene	ND	50.00	47.77	96	49.45	99	44-158	3	0-20	
Vinyl Chloride	ND	50.00	40.41	81	40.31	81	49-139	0	0-47	
p/m-Xylene	ND	100.0	101.6	102	100.7	101	70-130	1	0-30	
o-Xylene	ND	50.00	53.07	106	52.69	105	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	52.26	105	51.10	102	57-123	2	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-913	**LCS**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 11:43**	**140520B02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	452.6	113	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/14/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1098
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8495	**LCS**	**Solid**	**GC/MS XX**	**05/20/14**	**05/20/14 10:50**	**140520L025**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	46.62	93	78-120	71-127	
Carbon Tetrachloride	50.00	49.19	98	49-139	34-154	
Chlorobenzene	50.00	47.88	96	79-120	72-127	
1,2-Dibromoethane	50.00	48.55	97	80-120	73-127	
1,2-Dichlorobenzene	50.00	49.84	100	75-120	68-128	
1,2-Dichloroethane	50.00	47.38	95	80-120	73-127	
1,1-Dichloroethene	50.00	45.68	91	74-122	66-130	
Ethylbenzene	50.00	47.67	95	76-120	69-127	
Toluene	50.00	46.88	94	77-120	70-127	
Trichloroethene	50.00	47.78	96	80-120	73-127	
Vinyl Chloride	50.00	41.37	83	68-122	59-131	
p/m-Xylene	100.0	100.7	101	75-125	67-133	
o-Xylene	50.00	52.32	105	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	51.38	103	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-1098

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	628	GC 49	1
EPA 8260B	EPA 5030C	796	GC/MS XX	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-1098

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, May 20, 2014 7:12 AM
To: Stephen Nowak
Cc: Conlan, Linda; Huang, Stephen
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-05-1098

Please add EPA 8015 analysis for samples #1028 through #1032 on a 24 hour TAT.
Please add EPA 8260 analysis for sample #1032 on a 24 hour TAT.

Thanks.

From: Stephen Nowak [snowak@calscience.com]
Sent: Monday, May 19, 2014 6:15 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-05-1098

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience

7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com

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CHAIN-OF-CUSTODY RECORD

NB 27491

PROJECT NAME: FORMER PENTINEY CAST PLATE FACILITY

PROJECT NUMBER: 0106270030

RESULTS TO: L. Conlan

TURNAROUND TIME: 48-HR

SAMPLE SHIPMENT METHOD: Lab Courier

LABORATORY NAME: CalScience

LABORATORY ADDRESS:

LABORATORY CONTACT: Stephen Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

DATE: 5/14/14 PAGE 1 OF 2

REPORTING REQUIREMENTS:

14-05-1098

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Stephen Hwang, Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	RCS-FM8082	EPA 8015	EPA 8260	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5/14/14	0813	213-IV-P/S-0-004	X			4 oz glass	O		None	X		1	Pea gravel
2		1012	#1019	X				S			X		1	
3		1014	#1020	X				S			X		1	
4		1015	#1021	X				S			X		1	
5		1016	#1022	X				S			X		1	
6		1017	#1023	X				S			X		1	
7		1018	#1024	X				S			X		1	
8		1018	#1025	X				S			X		1	
9		1019	#1026	X				S			X		1	
10		1019	#1027	X				S			X		1	
11		1329	#1028	X				S			X		1	
12		1331	#1029	X				S			X		1	
13		1332	#1030	X				S			X		1	
14		1335	#1031	X				S			X		1	
15		1338	#1032	X				S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	5/14/14	1307	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/14/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/14/14	1507	SIGNATURE: PRINTED NAME: Adam Robson COMPANY: CEC	5/14/14	1507
SIGNATURE: PRINTED NAME: COMPANY: CEC	5/14/14	1716	SIGNATURE: PRINTED NAME: Noel Cruz COMPANY: CEC	05/14/14	1716

TOTAL NUMBER OF CONTAINERS: 15/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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CHAIN-OF-CUSTODY RECORD

NB 31332

PROJECT NAME: Pechiney

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: CalScience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

DATE: 5-14-14

PAGE 2 OF 2

REPORTING REQUIREMENTS: 1098

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	EPA 8260	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	5-14-14	1341	#1033	X	X	X	4 oz glass jar	S		None	X		1	
17	↓	1342	#1034	X	X	X	↓	S		↓	X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	5/14/14	1400	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	5/14/14	1400
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	5/14/14	1507	SIGNATURE: PRINTED NAME: Adam Ortson COMPANY: CEL	5/14/14	1507
SIGNATURE: PRINTED NAME: Adam Ortson COMPANY: CEL	5/14/14	1716	SIGNATURE: PRINTED NAME: Noel Conn COMPANY: CEL	5/14/14	1716

TOTAL NUMBER OF CONTAINERS: 2/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1 0 9 6

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/14/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.8 °C - 0.3 °C (CF) = 3.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☑ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 689

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 689

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-1394

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/21/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Pechiney / 0106270030
Work Order Number: 14-05-1394

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3 Detections Summary. 5

4 Client Sample Data. 6
4.1 EPA 8082 PCB Aroclors (Solid). 6

5 Quality Control Sample Data. 8
5.1 MS/MSD. 8
5.2 LCS/LCSD. 9

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-1394 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/19/14. They were assigned to Work Order 14-05-1394.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1394
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	05/19/14 09:55
		Number of Containers:	2
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
827-IV-P/S-CS-001	14-05-1394-1	05/19/14 08:45	1	Concrete
827-IV-P/S-CS-002	14-05-1394-2	05/19/14 08:48	1	Concrete

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-1394
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/19/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
827-IV-P/S-CS-001 (14-05-1394-1)						
Aroclor-1248	680		50	ug/kg	EPA 8082	EPA 3540C
827-IV-P/S-CS-002 (14-05-1394-2)						
Aroclor-1248	360		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1394
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
827-IV-P/S-CS-001	**14-05-1394-1-A**	**05/19/14 08:45**	**Concrete**	**GC 31**	**05/19/14**	**05/20/14 23:12**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	680	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

827-IV-P/S-CS-002	**14-05-1394-2-A**	**05/19/14 08:48**	**Concrete**	**GC 31**	**05/19/14**	**05/20/14 23:31**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	360	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1394
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-252**	**N/A**	**Solid**	**GC 31**	**05/19/14**	**05/20/14 22:52**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1394
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
827-IV-P/S-CS-002	**Sample**	**Concrete**	**GC 31**	**05/19/14**	**05/20/14 23:31**	**140519S10**
827-IV-P/S-CS-002	**Matrix Spike**	**Concrete**	**GC 31**	**05/19/14**	**05/20/14 23:50**	**140519S10**
827-IV-P/S-CS-002	**Matrix Spike Duplicate**	**Concrete**	**GC 31**	**05/19/14**	**05/21/14 00:09**	**140519S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	309.6	310	334.6	335	50-135	8	0-25	3
Aroclor-1260	ND	100.0	108.4	108	112.8	113	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1394
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-252	**LCS**	**Solid**	**GC 31**	**05/19/14**	**05/20/14 22:33**	**140519L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	99.92	100	50-135	
Aroclor-1260	100.0	109.6	110	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-1394

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-1394

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31337

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney

DATE: 5-19-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: drop off

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-05-1394

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
5-19-14	0845	827-IV-P/S-CS-001	X	4oz glass jar	O			X		1	concrete
↓	0848	827-IV-P/S-CS-002	X	↓	O			X		1	↓

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	5/19/14	0907	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY:	5/19/14	0907
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/19/14	0955	SIGNATURE: PRINTED NAME: Noel Cruz COMPANY: CCL	5/19/14	0955
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 2

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1394

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/19/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 4.6 °C - 0.3 °C (CF) = 4.3 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 300

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 300

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 300

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 300

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 836

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 300

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-1443

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/22/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-05-1443

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-1443 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/19/14. They were assigned to Work Order 14-05-1443.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1443
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	05/19/14 16:15
		Number of Containers:	5
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
DC-428	14-05-1443-1	05/19/14 08:00	1	Concrete
877-IIB-P/S-O-001	14-05-1443-2	05/19/14 10:21	1	Other
801-IV-P/S-SS-002	14-05-1443-3	05/19/14 11:39	1	Solid
876-IIIB-O-O-001	14-05-1443-4	05/19/14 11:45	1	Other
883-IIB-P/S-O-001	14-05-1443-5	05/19/14 12:45	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-1443
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/19/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
DC-428 (14-05-1443-1)						
Chromium	22.4		0.234	mg/kg	EPA 6010B	EPA 3050B
Chromium	1.98		0.100	mg/L	EPA 6010B	T22.11.5. AII
Aroclor-1248	530		50	ug/kg	EPA 8082	EPA 3540C
877-IIB-P/S-O-001 (14-05-1443-2)						
Barium	104		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	1.30		0.246	mg/kg	EPA 6010B	EPA 3050B
Cadmium	1.27		0.493	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.4		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	1.07		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	178		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	45.3		0.493	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	67.9		0.246	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.80		0.246	mg/kg	EPA 6010B	EPA 3050B
Silver	0.686		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	5.69		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	465		0.985	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	18000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2000		500	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-1443
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/19/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
876-IIIB-O-O-001 (14-05-1443-4)						
Arsenic	0.975		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	42.2		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.558		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	8.53		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	3.80		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	62.4		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	15.8		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	5.67		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	6.51		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	12.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	96.0		1.01	mg/kg	EPA 6010B	EPA 3050B
C9-C10	5400		250	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	6400		250	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	1100		250	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	580		250	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	470		250	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	1100		250	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	980		250	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	17000		250	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	88		50	ug/kg	EPA 8082	EPA 3540C
Naphthalene	26000		25000	ug/kg	EPA 8260B	EPA 5030C
883-IIB-P/S-O-001 (14-05-1443-5)						
Arsenic	2.00		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	73.6		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.265		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.4		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.10		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	13.2		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	23.5		0.508	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	1.09		0.254	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.46		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	20.6		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	51.6		1.02	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	22000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	960		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-1443
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/19/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
876-IIIB-O-O-001	**14-05-1443-4-A**	**05/19/14 11:45**	**Other**	**GC 49**	**05/20/14**	**05/21/14 10:51**	**140520B02**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	250	50.1	
C7	ND	250	50.1	
C8	ND	250	50.1	
C9-C10	5400	250	50.1	
C11-C12	6400	250	50.1	
C13-C14	1100	250	50.1	
C15-C16	580	250	50.1	
C17-C18	ND	250	50.1	
C19-C20	ND	250	50.1	
C21-C22	ND	250	50.1	
C23-C24	ND	250	50.1	
C25-C28	470	250	50.1	
C29-C32	1100	250	50.1	
C33-C36	980	250	50.1	
C37-C40	ND	250	50.1	
C41-C44	ND	250	50.1	
C6-C44 Total	17000	250	50.1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	141	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-913**	**N/A**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 11:27**	**140520B02**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-428	**14-05-1443-1-A**	**05/19/14 08:00**	**Concrete**	**ICP 7300**	**05/19/14**	**05/20/14 14:22**	**140519L04**

Parameter	Result	RL	DF	Qualifiers
Chromium	22.4	0.234	0.935	

Method Blank	**097-01-002-18397**	**N/A**	**Solid**	**ICP 7300**	**05/19/14**	**05/20/14 19:25**	**140519L04**

Parameter	Result	RL	DF	Qualifiers
Chromium	ND	0.250	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
877-IIB-P/S-O-001	**14-05-1443-2-A**	**05/19/14 10:21**	**Other**	**ICP 7300**	**05/19/14**	**05/20/14 14:23**	**140519L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	ND	0.739	0.985	
Barium	104	0.493	0.985	
Beryllium	1.30	0.246	0.985	
Cadmium	1.27	0.493	0.985	
Chromium	18.4	0.246	0.985	
Cobalt	1.07	0.246	0.985	
Copper	178	0.493	0.985	
Lead	45.3	0.493	0.985	
Molybdenum	67.9	0.246	0.985	
Nickel	8.80	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	0.686	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	5.69	0.246	0.985	
Zinc	465	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
876-IIIB-O-O-001	**14-05-1443-4-A**	**05/19/14 11:45**	**Other**	**ICP 7300**	**05/19/14**	**05/20/14 19:57**	**140519L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	0.975	0.758	1.01	
Barium	42.2	0.505	1.01	
Beryllium	0.558	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	8.53	0.253	1.01	
Cobalt	3.80	0.253	1.01	
Copper	62.4	0.505	1.01	
Lead	15.8	0.505	1.01	
Molybdenum	5.67	0.253	1.01	
Nickel	6.51	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	12.2	0.253	1.01	
Zinc	96.0	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
883-IIB-P/S-O-001	**14-05-1443-5-A**	**05/19/14 12:45**	**Solid**	**ICP 7300**	**05/19/14**	**05/20/14 19:59**	**140519L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	2.00	0.761	1.02	
Barium	73.6	0.508	1.02	
Beryllium	0.265	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	16.4	0.254	1.02	
Cobalt	6.10	0.254	1.02	
Copper	13.2	0.508	1.02	
Lead	23.5	0.508	1.02	
Molybdenum	1.09	0.254	1.02	
Nickel	9.46	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	20.6	0.254	1.02	
Zinc	51.6	1.02	1.02	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18397**	**N/A**	**Solid**	**ICP 7300**	**05/19/14**	**05/20/14 19:25**	**140519L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-428	**14-05-1443-1-A**	**05/19/14 08:00**	**Concrete**	**ICP 7300**	**05/19/14**	**05/21/14 17:08**	**140521LA2**

Parameter	Result	RL	DF	Qualifiers
Chromium	1.98	0.100	1.00	

Method Blank	**097-05-006-7266**	**N/A**	**Aqueous**	**ICP 7300**	**05/19/14**	**05/21/14 16:23**	**140521LA2**

Parameter	Result	RL	DF	Qualifiers
Chromium	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Pechiney / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
877-IIB-P/S-O-001	**14-05-1443-2-A**	**05/19/14 10:21**	**Other**	**Mercury 04**	**05/20/14**	**05/20/14 15:57**	**140520L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

876-IIIB-O-O-001	**14-05-1443-4-A**	**05/19/14 11:45**	**Other**	**Mercury 04**	**05/20/14**	**05/20/14 15:59**	**140520L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

883-IIB-P/S-O-001	**14-05-1443-5-A**	**05/19/14 12:45**	**Solid**	**Mercury 04**	**05/20/14**	**05/20/14 16:01**	**140520L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Method Blank	**099-16-272-240**	**N/A**	**Solid**	**Mercury 04**	**05/20/14**	**05/20/14 12:45**	**140520L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-428	**14-05-1443-1-A**	**05/19/14 08:00**	**Concrete**	**GC 31**	**05/19/14**	**05/21/14 04:35**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	530	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

877-IIB-P/S-O-001	**14-05-1443-2-A**	**05/19/14 10:21**	**Other**	**GC 31**	**05/19/14**	**05/21/14 14:15**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	2000	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	200	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	172	50-130	1,2,7

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
877-IIB-P/S-O-001	**14-05-1443-2-A**	**05/19/14 10:21**	**Other**	**GC 31**	**05/19/14**	**05/21/14 13:56**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	18000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
801-IV-P/S-SS-002	**14-05-1443-3-A**	**05/19/14 11:39**	**Solid**	**GC 31**	**05/19/14**	**05/21/14 05:13**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
876-IIIB-O-O-001	**14-05-1443-4-A**	**05/19/14 11:45**	**Other**	**GC 31**	**05/19/14**	**05/21/14 13:18**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	88	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	128	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

883-IIB-P/S-O-001	**14-05-1443-5-A**	**05/19/14 12:45**	**Solid**	**GC 31**	**05/19/14**	**05/21/14 05:52**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	960	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
883-IIB-P/S-O-001	**14-05-1443-5-A**	**05/19/14 12:45**	**Solid**	**GC 31**	**05/19/14**	**05/21/14 14:34**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	22000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

Method Blank	**099-02-003-252**	**N/A**	**Solid**	**GC 31**	**05/19/14**	**05/20/14 22:52**	**140519L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
876-IIIB-O-O-001	**14-05-1443-4-A**	**05/19/14 11:45**	**Other**	**GC/MS Z**	**05/19/14**	**05/19/14 23:10**	**140519L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	63000	250	
Benzene	ND	2500	250	
Bromobenzene	ND	2500	250	
Bromochloromethane	ND	2500	250	
Bromodichloromethane	ND	2500	250	
Bromoform	ND	2500	250	
Bromomethane	ND	13000	250	
2-Butanone	ND	25000	250	
n-Butylbenzene	ND	2500	250	
sec-Butylbenzene	ND	2500	250	
tert-Butylbenzene	ND	2500	250	
Carbon Disulfide	ND	25000	250	
Carbon Tetrachloride	ND	2500	250	
Chlorobenzene	ND	2500	250	
Chloroethane	ND	2500	250	
Chloroform	ND	2500	250	
Chloromethane	ND	13000	250	
2-Chlorotoluene	ND	2500	250	
4-Chlorotoluene	ND	2500	250	
Dibromochloromethane	ND	2500	250	
1,2-Dibromo-3-Chloropropane	ND	5000	250	
1,2-Dibromoethane	ND	2500	250	
Dibromomethane	ND	2500	250	
1,2-Dichlorobenzene	ND	2500	250	
1,3-Dichlorobenzene	ND	2500	250	
1,4-Dichlorobenzene	ND	2500	250	
Dichlorodifluoromethane	ND	2500	250	
1,1-Dichloroethane	ND	2500	250	
1,2-Dichloroethane	ND	2500	250	
1,1-Dichloroethene	ND	2500	250	
c-1,2-Dichloroethene	ND	2500	250	
t-1,2-Dichloroethene	ND	2500	250	
1,2-Dichloropropane	ND	2500	250	
1,3-Dichloropropane	ND	2500	250	
2,2-Dichloropropane	ND	2500	250	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2500	250	
c-1,3-Dichloropropene	ND	2500	250	
t-1,3-Dichloropropene	ND	2500	250	
Ethylbenzene	ND	2500	250	
2-Hexanone	ND	25000	250	
Isopropylbenzene	ND	2500	250	
p-Isopropyltoluene	ND	2500	250	
Methylene Chloride	ND	25000	250	
4-Methyl-2-Pentanone	ND	25000	250	
Naphthalene	26000	25000	250	
n-Propylbenzene	ND	2500	250	
Styrene	ND	2500	250	
1,1,1,2-Tetrachloroethane	ND	2500	250	
1,1,2,2-Tetrachloroethane	ND	2500	250	
Tetrachloroethene	ND	2500	250	
Toluene	ND	2500	250	
1,2,3-Trichlorobenzene	ND	5000	250	
1,2,4-Trichlorobenzene	ND	2500	250	
1,1,1-Trichloroethane	ND	2500	250	
1,1,2-Trichloroethane	ND	2500	250	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	25000	250	
Trichloroethene	ND	2500	250	
1,2,3-Trichloropropane	ND	2500	250	
1,2,4-Trimethylbenzene	ND	2500	250	
Trichlorofluoromethane	ND	25000	250	
1,3,5-Trimethylbenzene	ND	2500	250	
Vinyl Acetate	ND	25000	250	
Vinyl Chloride	ND	2500	250	
p/m-Xylene	ND	2500	250	
o-Xylene	ND	2500	250	
Methyl-t-Butyl Ether (MTBE)	ND	2500	250	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	60-132	
Dibromofluoromethane	96	63-141	
1,2-Dichloroethane-d4	97	62-146	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-8493**	**N/A**	**Solid**	**GC/MS Z**	**05/19/14**	**05/19/14 13:46**	**140519L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	12000	50.0	
Benzene	ND	500	50.0	
Bromobenzene	ND	500	50.0	
Bromochloromethane	ND	500	50.0	
Bromodichloromethane	ND	500	50.0	
Bromoform	ND	500	50.0	
Bromomethane	ND	2500	50.0	
2-Butanone	ND	5000	50.0	
n-Butylbenzene	ND	500	50.0	
sec-Butylbenzene	ND	500	50.0	
tert-Butylbenzene	ND	500	50.0	
Carbon Disulfide	ND	5000	50.0	
Carbon Tetrachloride	ND	500	50.0	
Chlorobenzene	ND	500	50.0	
Chloroethane	ND	500	50.0	
Chloroform	ND	500	50.0	
Chloromethane	ND	2500	50.0	
2-Chlorotoluene	ND	500	50.0	
4-Chlorotoluene	ND	500	50.0	
Dibromochloromethane	ND	500	50.0	
1,2-Dibromo-3-Chloropropane	ND	1000	50.0	
1,2-Dibromoethane	ND	500	50.0	
Dibromomethane	ND	500	50.0	
1,2-Dichlorobenzene	ND	500	50.0	
1,3-Dichlorobenzene	ND	500	50.0	
1,4-Dichlorobenzene	ND	500	50.0	
Dichlorodifluoromethane	ND	500	50.0	
1,1-Dichloroethane	ND	500	50.0	
1,2-Dichloroethane	ND	500	50.0	
1,1-Dichloroethene	ND	500	50.0	
c-1,2-Dichloroethene	ND	500	50.0	
t-1,2-Dichloroethene	ND	500	50.0	
1,2-Dichloropropane	ND	500	50.0	
1,3-Dichloropropane	ND	500	50.0	
2,2-Dichloropropane	ND	500	50.0	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	05/19/14
121 Innovation Drive, Suite 200	Work Order:	14-05-1443
Irvine, CA 92617-3094	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: Pechiney / 0106270030		Page 4 of 4

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	500	50.0	
c-1,3-Dichloropropene	ND	500	50.0	
t-1,3-Dichloropropene	ND	500	50.0	
Ethylbenzene	ND	500	50.0	
2-Hexanone	ND	5000	50.0	
Isopropylbenzene	ND	500	50.0	
p-Isopropyltoluene	ND	500	50.0	
Methylene Chloride	ND	5000	50.0	
4-Methyl-2-Pentanone	ND	5000	50.0	
Naphthalene	ND	5000	50.0	
n-Propylbenzene	ND	500	50.0	
Styrene	ND	500	50.0	
1,1,1,2-Tetrachloroethane	ND	500	50.0	
1,1,2,2-Tetrachloroethane	ND	500	50.0	
Tetrachloroethene	ND	500	50.0	
Toluene	ND	500	50.0	
1,2,3-Trichlorobenzene	ND	1000	50.0	
1,2,4-Trichlorobenzene	ND	500	50.0	
1,1,1-Trichloroethane	ND	500	50.0	
1,1,2-Trichloroethane	ND	500	50.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5000	50.0	
Trichloroethene	ND	500	50.0	
1,2,3-Trichloropropane	ND	500	50.0	
1,2,4-Trimethylbenzene	ND	500	50.0	
Trichlorofluoromethane	ND	5000	50.0	
1,3,5-Trimethylbenzene	ND	500	50.0	
Vinyl Acetate	ND	5000	50.0	
Vinyl Chloride	ND	500	50.0	
p/m-Xylene	ND	500	50.0	
o-Xylene	ND	500	50.0	
Methyl-t-Butyl Ether (MTBE)	ND	500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	60-132	
Dibromofluoromethane	80	63-141	
1,2-Dichloroethane-d4	92	62-146	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1063-12	**Sample**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 16:59**	**140520S02**
14-05-1063-12	**Matrix Spike**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 11:59**	**140520S02**
14-05-1063-12	**Matrix Spike Duplicate**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 12:15**	**140520S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	427.2	107	412.2	103	64-130	4	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1392-1	**Sample**	**Solid**	**ICP 7300**	**05/19/14**	**05/20/14 19:39**	**140519S04**
14-05-1392-1	**Matrix Spike**	**Solid**	**ICP 7300**	**05/19/14**	**05/20/14 19:40**	**140519S04**
14-05-1392-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/19/14**	**05/20/14 19:41**	**140519S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	12.25	49	12.84	51	80-120	5	0-20	3
Arsenic	ND	25.00	25.60	102	26.66	107	80-120	4	0-20	
Barium	197.3	25.00	198.1	4X	206.8	4X	80-120	4X	0-20	Q
Beryllium	ND	25.00	25.47	102	26.54	106	80-120	4	0-20	
Cadmium	ND	25.00	24.37	97	25.58	102	80-120	5	0-20	
Chromium	1.115	25.00	23.36	89	24.53	94	80-120	5	0-20	
Cobalt	0.6898	25.00	26.14	102	26.96	105	80-120	3	0-20	
Copper	22.74	25.00	46.45	95	47.95	101	80-120	3	0-20	
Lead	ND	25.00	24.76	99	25.62	102	80-120	3	0-20	
Molybdenum	1.500	25.00	23.91	90	25.03	94	80-120	5	0-20	
Nickel	22.32	25.00	45.27	92	46.94	98	80-120	4	0-20	
Selenium	ND	25.00	23.60	94	24.44	98	80-120	4	0-20	
Silver	ND	12.50	12.67	101	13.16	105	80-120	4	0-20	
Thallium	ND	25.00	14.76	59	17.21	69	80-120	15	0-20	3
Vanadium	6.118	25.00	31.03	100	32.55	106	80-120	5	0-20	
Zinc	36.36	25.00	56.01	79	58.92	90	80-120	5	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1488-1	**Sample**	**Aqueous**	**ICP 7300**	**05/21/14**	**05/21/14 16:58**	**140521SA2**
14-05-1488-1	**Matrix Spike**	**Aqueous**	**ICP 7300**	**05/21/14**	**05/21/14 17:00**	**140521SA2**
14-05-1488-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP 7300**	**05/21/14**	**05/21/14 17:02**	**140521SA2**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium	ND	5.000	5.478	110	5.354	107	75-125	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1232-1	**Sample**	**Solid**	**Mercury 04**	**05/20/14**	**05/20/14 13:05**	**140520S01**
14-05-1232-1	**Matrix Spike**	**Solid**	**Mercury 04**	**05/20/14**	**05/20/14 13:12**	**140520S01**
14-05-1232-1	**Matrix Spike Duplicate**	**Solid**	**Mercury 04**	**05/20/14**	**05/20/14 13:14**	**140520S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7882	94	0.7945	95	71-137	1	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1394-2	**Sample**	**Concrete**	**GC 31**	**05/19/14**	**05/20/14 23:31**	**140519S10**
14-05-1394-2	**Matrix Spike**	**Concrete**	**GC 31**	**05/19/14**	**05/20/14 23:50**	**140519S10**
14-05-1394-2	**Matrix Spike Duplicate**	**Concrete**	**GC 31**	**05/19/14**	**05/21/14 00:09**	**140519S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	309.6	310	334.6	335	50-135	8	0-25	3
Aroclor-1260	ND	100.0	108.4	108	112.8	113	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 0106270030			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1359-1	**Sample**	**Solid**	**GC/MS Z**	**05/19/14**	**05/19/14 14:22**	**140519S003**
14-05-1359-1	**Matrix Spike**	**Solid**	**GC/MS Z**	**05/19/14**	**05/19/14 15:41**	**140519S003**
14-05-1359-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS Z**	**05/19/14**	**05/19/14 16:07**	**140519S003**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	42.63	85	42.74	85	61-127	0	0-20	
Carbon Tetrachloride	ND	50.00	38.34	77	37.57	75	51-135	2	0-29	
Chlorobenzene	ND	50.00	43.22	86	43.78	88	57-123	1	0-20	
1,2-Dibromoethane	ND	50.00	46.47	93	47.35	95	64-124	2	0-20	
1,2-Dichlorobenzene	ND	50.00	42.08	84	42.32	85	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	45.23	90	45.19	90	80-120	0	0-20	
1,1-Dichloroethene	ND	50.00	41.62	83	41.66	83	47-143	0	0-25	
Ethylbenzene	ND	50.00	42.80	86	42.34	85	57-129	1	0-22	
Toluene	ND	50.00	42.80	86	43.24	86	63-123	1	0-20	
Trichloroethene	ND	50.00	41.55	83	41.65	83	44-158	0	0-20	
Vinyl Chloride	ND	50.00	42.80	86	45.67	91	49-139	6	0-47	
p/m-Xylene	ND	100.0	87.85	88	88.37	88	70-130	1	0-30	
o-Xylene	ND	50.00	45.92	92	45.99	92	70-130	0	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	46.05	92	46.07	92	57-123	0	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - PDS

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-05-1392-1	**Sample**	**Solid**	**ICP 7300**	**05/19/14 00:00**	**05/20/14 19:39**	**140519S04**
14-05-1392-1	**PDS**	**Solid**	**ICP 7300**	**05/19/14 00:00**	**05/20/14 19:43**	**140519S04**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Antimony	ND	25.00	25.15	101	75-125	
Arsenic	ND	25.00	26.22	105	75-125	
Barium	197.3	25.00	218.2	4X	75-125	Q
Beryllium	ND	25.00	25.39	102	75-125	
Cadmium	ND	25.00	24.56	98	75-125	
Chromium	1.115	25.00	25.63	98	75-125	
Cobalt	0.6898	25.00	25.93	101	75-125	
Copper	22.74	25.00	47.99	101	75-125	
Lead	ND	25.00	24.72	99	75-125	
Molybdenum	1.500	25.00	27.31	103	75-125	
Nickel	22.32	25.00	46.34	96	75-125	
Selenium	ND	25.00	23.39	94	75-125	
Silver	ND	12.50	12.45	100	75-125	
Thallium	ND	25.00	24.78	99	75-125	
Vanadium	6.118	25.00	31.22	100	75-125	
Zinc	36.36	25.00	60.11	95	75-125	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Pechiney / 0106270030			Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-913	**LCS**	**Solid**	**GC 49**	**05/20/14**	**05/20/14 11:43**	**140520B02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	452.6	113	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18397	**LCS**	**Solid**	**ICP 7300**	**05/19/14**	**05/20/14 19:31**	**140519L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.54	102	80-120	73-127	
Arsenic	25.00	24.63	99	80-120	73-127	
Barium	25.00	25.44	102	80-120	73-127	
Beryllium	25.00	24.83	99	80-120	73-127	
Cadmium	25.00	26.13	105	80-120	73-127	
Chromium	25.00	25.52	102	80-120	73-127	
Cobalt	25.00	28.09	112	80-120	73-127	
Copper	25.00	26.46	106	80-120	73-127	
Lead	25.00	26.61	106	80-120	73-127	
Molybdenum	25.00	25.72	103	80-120	73-127	
Nickel	25.00	27.18	109	80-120	73-127	
Selenium	25.00	22.48	90	80-120	73-127	
Silver	12.50	12.85	103	80-120	73-127	
Thallium	25.00	26.86	107	80-120	73-127	
Vanadium	25.00	24.80	99	80-120	73-127	
Zinc	25.00	26.15	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Pechiney / 0106270030			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7266	**LCS**	**Aqueous**	**ICP 7300**	**05/19/14**	**05/21/14 16:25**	**140521LA2**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Chromium	5.000	5.415	108	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Pechiney / 0106270030			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-240	**LCS**	**Solid**	**Mercury 04**	**05/20/14**	**05/20/14 12:50**	**140520L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8155	98	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-252	**LCS**	**Solid**	**GC 31**	**05/19/14**	**05/20/14 22:33**	**140519L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	99.92	100	50-135	
Aroclor-1260	100.0	109.6	110	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/19/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1443
Irvine, CA 92617-3094		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: Pechiney / 0106270030			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-8493	**LCS**	**Solid**	**GC/MS Z**	**05/19/14**	**05/19/14 12:21**	**140519L021**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	50.84	102	78-120	71-127	
Carbon Tetrachloride	50.00	49.38	99	49-139	34-154	
Chlorobenzene	50.00	52.11	104	79-120	72-127	
1,2-Dibromoethane	50.00	52.60	105	80-120	73-127	
1,2-Dichlorobenzene	50.00	51.99	104	75-120	68-128	
1,2-Dichloroethane	50.00	50.63	101	80-120	73-127	
1,1-Dichloroethene	50.00	47.32	95	74-122	66-130	
Ethylbenzene	50.00	51.73	103	76-120	69-127	
Toluene	50.00	51.71	103	77-120	70-127	
Trichloroethene	50.00	49.17	98	80-120	73-127	
Vinyl Chloride	50.00	52.53	105	68-122	59-131	
p/m-Xylene	100.0	106.2	106	75-125	67-133	
o-Xylene	50.00	54.32	109	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	48.87	98	77-120	70-127	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-1443

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 6010B	T22.11.5. AII	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	776	Mercury 04	1
EPA 8015B (M)	EPA 3550B	628	GC 49	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5030C	796	GC/MS Z	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-1443

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31338

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Pechiney

DATE: 5-19-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: **14-05-1443**

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	Chromium	STLC Cr	EPA 8082	Title 22 Metals	EPA 8015	EPA 8260	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-19-14	0800	DC-428	X	X	X				4 oz glass jar	O			X		1	concrete
2	↓	1021	877-IIB-P/S-0-ØØ1			X	X				O			X		1	
3		1139	801-IV-P/S-SS-002			X					S			X		1	
4		1145	876-IIIB-0-0-ØØ1			X	X	X	X		O			X		1	
5		1245	883-IIB-P/S-0-ØØ1			X	X				S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	5/19/14	1503	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/19/14	1503
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/19/14	1505	SIGNATURE: PRINTED NAME: D. Irawan COMPANY: CEL	5/19/14	1505
SIGNATURE: PRINTED NAME: D. Irawan COMPANY: CEL	5/19/14	1615	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	5/19/14	1615

TOTAL NUMBER OF CONTAINERS: 5

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1 4 2 3

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05 / 19 / 14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3 . 1 °C - 0.3 °C (CF) = 2 . 8 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 826

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** WO3

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** WO3

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-1534

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Pechiney / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/22/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-05-1534

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-1534 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/20/14. They were assigned to Work Order 14-05-1534.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1534
		Project Name:	Pechiney / 0106270030
		PO Number:	
		Date/Time Received:	05/20/14 17:20
		Number of Containers:	7
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
293-IIIB-P/S-CS-033	14-05-1534-1	05/20/14 08:40	1	Concrete
#1046	14-05-1534-2	05/20/14 09:04	1	Solid
#1044	14-05-1534-3	05/20/14 09:05	1	Solid
#1045	14-05-1534-4	05/20/14 09:06	1	Solid
879-IIB-O-CS-001	14-05-1534-5	05/20/14 09:17	1	Concrete
882-IIB-CS-CS-001	14-05-1534-6	05/20/14 09:30	1	Concrete
877-IIB-P/S-CS-001	14-05-1534-7	05/20/14 09:36	1	Concrete

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-1534
	121 Innovation Drive, Suite 200	Project Name:	Pechiney / 0106270030
	Irvine, CA 92617-3094	Received:	05/20/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
293-IIIB-P/S-CS-033 (14-05-1534-1)						
Aroclor-1248	250000		50000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	8200		5000	ug/kg	EPA 8082	EPA 3540C
#1044 (14-05-1534-3)						
Aroclor-1248	2700		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	450		50	ug/kg	EPA 8082	EPA 3540C
#1045 (14-05-1534-4)						
Aroclor-1248	260		51	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	66		51	ug/kg	EPA 8082	EPA 3540C
879-IIB-O-CS-001 (14-05-1534-5)						
Aroclor-1248	6100000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	170000		50000	ug/kg	EPA 8082	EPA 3540C
882-IIB-CS-CS-001 (14-05-1534-6)						
Aroclor-1248	110		50	ug/kg	EPA 8082	EPA 3540C
877-IIB-P/S-CS-001 (14-05-1534-7)						
Aroclor-1248	830		51	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	90		51	ug/kg	EPA 8082	EPA 3540C

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/20/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1534
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIB-P/S-CS-033	**14-05-1534-1-A**	**05/20/14 08:40**	**Concrete**	**GC 58**	**05/20/14**	**05/22/14 15:45**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	8200	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

293-IIIB-P/S-CS-033	**14-05-1534-1-A**	**05/20/14 08:40**	**Concrete**	**GC 58**	**05/20/14**	**05/22/14 13:03**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	250000	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/20/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1534
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1046	**14-05-1534-2-A**	**05/20/14 09:04**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 13:21**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

#1044	**14-05-1534-3-A**	**05/20/14 09:05**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 16:22**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	450	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/20/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1534
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1044	**14-05-1534-3-A**	**05/20/14 09:05**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 13:39**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	2700	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1045	**14-05-1534-4-A**	**05/20/14 09:06**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 13:57**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	260	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	66	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/20/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1534
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
879-IIB-O-CS-001	**14-05-1534-5-A**	**05/20/14 09:17**	**Concrete**	**GC 58**	**05/20/14**	**05/22/14 14:15**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	170000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	190	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	130	50-130	

879-IIB-O-CS-001	**14-05-1534-5-A**	**05/20/14 09:17**	**Concrete**	**GC 58**	**05/20/14**	**05/22/14 16:41**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	6100000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	500	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/20/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1534
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
882-IIB-CS-CS-001	**14-05-1534-6-A**	**05/20/14 09:30**	**Concrete**	**GC 58**	**05/20/14**	**05/22/14 14:33**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	110	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

877-IIB-P/S-CS-001	**14-05-1534-7-A**	**05/20/14 09:36**	**Concrete**	**GC 58**	**05/20/14**	**05/22/14 14:51**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	830	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	90	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/20/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1534
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Pechiney / 0106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-253**	**N/A**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 12:45**	**140520L22**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/20/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1534
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1045	**Sample**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 13:57**	**140520S22**
#1045	**Matrix Spike**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 15:09**	**140520S22**
#1045	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 15:27**	**140520S22**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	140.8	141	179.7	180	50-135	24	0-25	3
Aroclor-1260	65.62	100.0	141.8	76	135.9	70	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/20/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1534
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Pechiney / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-253	**LCS**	**Solid**	**GC 58**	**05/20/14**	**05/22/14 12:27**	**140520L22**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	86.84	87	50-135	
Aroclor-1260	100.0	87.04	87	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-1534

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	669	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-1534

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31339

PROJECT NAME: Pechiney			DATE: 5-20-14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS: 14-05-1534
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chomunsky

ANALYSES: EPA 8082

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-20-14	0840	293-IIIB-P/S-CS-033	X	4oz glass jar	O			X		1	concrete ~~chips~~ Kahc
2		0904	#1046	X		S			X		1	
3		0905	#1044	X		S			X		1	
4		0906	#1045	X		S			X		1	
5	(Kahc)	0917	879-IIB-O-CS-001	X		O			X		1	concrete chips
6		0930	882-IIB-CS-CS-001	X		O			X		1	concrete
7		0936	877-IIB-P/S-CS-001	X		O			X		1	concrete

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chomunsky PRINTED NAME: Kimberly Chomunsky COMPANY: AMEC	5/20/14	1400	SIGNATURE: PRINTED NAME: [illegible] COMPANY: AMEC	5/20/14	~~1500~~ 1400
SIGNATURE: PRINTED NAME: [illegible] COMPANY: AMEC	5/20/14	1530	SIGNATURE: PRINTED NAME: D. Pearson COMPANY: CEL	5/20/14	15.30
SIGNATURE: PRINTED NAME: D. Pearson COMPANY: CEL	5/20/14	(CEL) ~~15.30~~ 17.20	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	5/20/14	1720

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1534

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/20/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
* ☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels. (-2) to (-7)			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** pov

* collection date per label is 5/20/14.

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-1652

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AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/23/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-05-1652

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Work Order Narrative

Work Order: 14-05-1652 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/21/14. They were assigned to Work Order 14-05-1652.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	05/21/14 18:35
		Number of Containers:	17
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1047	14-05-1652-1	05/21/14 08:01	1	Solid
#1048	14-05-1652-2	05/21/14 08:02	1	Solid
#1049	14-05-1652-3	05/21/14 08:03	1	Solid
#1050	14-05-1652-4	05/21/14 08:05	1	Solid
#1051	14-05-1652-5	05/21/14 08:06	1	Solid
#1052-15	14-05-1652-6	05/21/14 09:50	1	Solid
#1053-15	14-05-1652-7	05/21/14 10:04	1	Solid
#1054-13.5	14-05-1652-8	05/21/14 10:15	1	Solid
#1055-13.5	14-05-1652-9	05/21/14 10:26	1	Solid
DC-429	14-05-1652-10	05/21/14 11:47	1	Other
885-IV-R/R-SS-001	14-05-1652-11	05/21/14 13:13	1	Solid
885-IV-R/R-SS-002	14-05-1652-12	05/21/14 13:16	1	Solid
885-IV-R/R-SS-003	14-05-1652-13	05/21/14 13:19	1	Solid
885-IV-R/R-SS-004	14-05-1652-14	05/21/14 13:22	1	Solid
885-IV-R/R-SS-005	14-05-1652-15	05/21/14 13:25	1	Solid
885-IV-R/R-SS-006	14-05-1652-16	05/21/14 13:29	1	Solid
885-IV-R/R-SS-007	14-05-1652-17	05/21/14 13:31	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/21/14
Attn:	Linda Conlan		Page 1 of 6

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1047 (14-05-1652-1)						
Arsenic	5.64		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	128		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.458		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	25.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	11.0		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.354		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	843		1.00	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0969		0.0847	mg/kg	EPA 7471A	EPA 7471A Total
#1048 (14-05-1652-2)						
Arsenic	95.9		0.761	mg/kg	EPA 6010B	EPA 3050B
Barium	134		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.413		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	19.2		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.3		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	29.5		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	17.9		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	14.3		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.2		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	87.7		1.02	mg/kg	EPA 6010B	EPA 3050B
#1049 (14-05-1652-3)						
Arsenic	28.9		0.781	mg/kg	EPA 6010B	EPA 3050B
Barium	110		0.521	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.352		0.260	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.7		0.260	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.5		0.260	mg/kg	EPA 6010B	EPA 3050B
Copper	25.7		0.521	mg/kg	EPA 6010B	EPA 3050B
Lead	33.8		0.521	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.6		0.260	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.2		0.260	mg/kg	EPA 6010B	EPA 3050B
Zinc	136		1.04	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/21/14
Attn:	Linda Conlan		Page 2 of 6

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1050 (14-05-1652-4)						
Arsenic	1.79		0.765	mg/kg	EPA 6010B	EPA 3050B
Barium	145		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.502		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.4		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.1		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	21.2		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	2.45		0.510	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.386		0.255	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.3		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.5		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	57.6		1.02	mg/kg	EPA 6010B	EPA 3050B
#1051 (14-05-1652-5)						
Arsenic	13.9		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	115		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.391		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.3		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.1		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	51.8		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	31.0		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.7		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	167		1.01	mg/kg	EPA 6010B	EPA 3050B
#1052-15 (14-05-1652-6)						
Aroclor-1248	200		50	ug/kg	EPA 8082	EPA 3540C
#1053-15 (14-05-1652-7)						
Aroclor-1248	1200		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	50		50	ug/kg	EPA 8082	EPA 3540C
#1054-13.5 (14-05-1652-8)						
Aroclor-1248	780		51	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	53		51	ug/kg	EPA 8082	EPA 3540C
#1055-13.5 (14-05-1652-9)						
Aroclor-1248	140		51	ug/kg	EPA 8082	EPA 3540C
DC-429 (14-05-1652-10)						
Aroclor-1248	4300000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	270000		50000	ug/kg	EPA 8082	EPA 3540C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/21/14
Attn:	Linda Conlan		Page 3 of 6

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-001 (14-05-1652-11)						
Arsenic	11.2		0.732	mg/kg	EPA 6010B	EPA 3050B
Barium	112		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.302		0.244	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.6		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.87		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	24.9		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	44.9		0.488	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.4		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.1		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	115		0.976	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	61		50	ug/kg	EPA 8082	EPA 3540C
885-IV-R/R-SS-002 (14-05-1652-12)						
Arsenic	2.59		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	126		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.357		0.253	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.772		0.505	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.8		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.4		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	23.1		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	26.0		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.3		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.6		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	221		1.01	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/21/14
Attn:	Linda Conlan		Page 4 of 6

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-003 (14-05-1652-13)						
Arsenic	6.35		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	118		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.597		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	101		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.59		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	375		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	43.8		0.495	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.548		0.248	mg/kg	EPA 6010B	EPA 3050B
Nickel	21.6		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.7		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	929		0.990	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0832		0.0806	mg/kg	EPA 7471A	EPA 7471A Total
C25-C28	6.8		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	16		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	60		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	510		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	430		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	85		50	ug/kg	EPA 8082	EPA 3540C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/21/14
Attn:	Linda Conlan		Page 5 of 6

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-004 (14-05-1652-14)						
Arsenic	4.43		0.758	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.505	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.352		0.253	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.0		0.253	mg/kg	EPA 6010B	EPA 3050B
Copper	26.2		0.505	mg/kg	EPA 6010B	EPA 3050B
Lead	41.3		0.505	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.331		0.253	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.0		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.2		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	152		1.01	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0911		0.0847	mg/kg	EPA 7471A	EPA 7471A Total
C15-C16	5.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	7.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	55		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
885-IV-R/R-SS-005 (14-05-1652-15)						
Arsenic	5.60		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	122		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.374		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	19.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	63.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	11.1		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	182		1.00	mg/kg	EPA 6010B	EPA 3050B
C29-C32	6.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	6.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1260	61		50	ug/kg	EPA 8082	EPA 3540C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/21/14
Attn:	Linda Conlan		Page 6 of 6

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-006 (14-05-1652-16)						
Arsenic	4.50		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	105		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.303		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.5		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.0		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	15.3		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	1.54		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.2		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.2		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	50.0		0.990	mg/kg	EPA 6010B	EPA 3050B
885-IV-R/R-SS-007 (14-05-1652-17)						
Arsenic	21.9		0.714	mg/kg	EPA 6010B	EPA 3050B
Barium	176		0.476	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.390		0.238	mg/kg	EPA 6010B	EPA 3050B
Chromium	19.2		0.238	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.6		0.238	mg/kg	EPA 6010B	EPA 3050B
Copper	42.8		0.476	mg/kg	EPA 6010B	EPA 3050B
Lead	175		0.476	mg/kg	EPA 6010B	EPA 3050B
Nickel	14.1		0.238	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.6		0.238	mg/kg	EPA 6010B	EPA 3050B
Zinc	248		0.952	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-001	**14-05-1652-11-A**	**05/21/14 13:13**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 13:41**	**140522B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	75	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-002	**14-05-1652-12-A**	**05/21/14 13:16**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 13:57**	**140522B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	88	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-003	**14-05-1652-13-A**	**05/21/14 13:19**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 14:14**	**140522B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	6.8	5.0	1.00	
C29-C32	16	5.0	1.00	
C33-C36	16	5.0	1.00	
C37-C40	10	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	60	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-004	**14-05-1652-14-A**	**05/21/14 13:22**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 14:31**	**140522B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	5.4	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	7.3	5.0	1.00	
C29-C32	12	5.0	1.00	
C33-C36	11	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	55	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-005	**14-05-1652-15-A**	**05/21/14 13:25**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 14:48**	**140522B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	6.0	5.0	1.00	
C33-C36	6.4	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	17	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-006	**14-05-1652-16-A**	**05/21/14 13:29**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 15:05**	**140522B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	108	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-007	**14-05-1652-17-A**	**05/21/14 13:31**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 15:21**	**140522B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	132	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-920**	**N/A**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 12:19**	**140522B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	91	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1047	**14-05-1652-1-A**	**05/21/14 08:01**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:05**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	5.64	0.750	1.00	
Barium	128	0.500	1.00	
Beryllium	0.458	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	17.9	0.250	1.00	
Cobalt	11.9	0.250	1.00	
Copper	25.4	0.500	1.00	
Lead	11.0	0.500	1.00	
Molybdenum	0.354	0.250	1.00	
Nickel	13.3	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	38.4	0.250	1.00	
Zinc	843	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1048	**14-05-1652-2-A**	**05/21/14 08:02**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:10**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	95.9	0.761	1.02	
Barium	134	0.508	1.02	
Beryllium	0.413	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	19.2	0.254	1.02	
Cobalt	12.3	0.254	1.02	
Copper	29.5	0.508	1.02	
Lead	17.9	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	14.3	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	38.2	0.254	1.02	
Zinc	87.7	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1049	**14-05-1652-3-A**	**05/21/14 08:03**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:11**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.781	1.04	
Arsenic	28.9	0.781	1.04	
Barium	110	0.521	1.04	
Beryllium	0.352	0.260	1.04	
Cadmium	ND	0.521	1.04	
Chromium	17.7	0.260	1.04	
Cobalt	10.5	0.260	1.04	
Copper	25.7	0.521	1.04	
Lead	33.8	0.521	1.04	
Molybdenum	ND	0.260	1.04	
Nickel	12.6	0.260	1.04	
Selenium	ND	0.781	1.04	
Silver	ND	0.260	1.04	
Thallium	ND	0.781	1.04	
Vanadium	34.2	0.260	1.04	
Zinc	136	1.04	1.04	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1050	**14-05-1652-4-A**	**05/21/14 08:05**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:12**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	1.79	0.765	1.02	
Barium	145	0.510	1.02	
Beryllium	0.502	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	17.4	0.255	1.02	
Cobalt	12.1	0.255	1.02	
Copper	21.2	0.510	1.02	
Lead	2.45	0.510	1.02	
Molybdenum	0.386	0.255	1.02	
Nickel	13.3	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	39.5	0.255	1.02	
Zinc	57.6	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1051	**14-05-1652-5-A**	**05/21/14 08:06**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:13**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	13.9	0.758	1.01	
Barium	115	0.505	1.01	
Beryllium	0.391	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	18.3	0.253	1.01	
Cobalt	10.1	0.253	1.01	
Copper	51.8	0.505	1.01	
Lead	31.0	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	13.7	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	32.8	0.253	1.01	
Zinc	167	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-001	**14-05-1652-11-A**	**05/21/14 13:13**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:26**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.732	0.976	
Arsenic	11.2	0.732	0.976	
Barium	112	0.488	0.976	
Beryllium	0.302	0.244	0.976	
Cadmium	ND	0.488	0.976	
Chromium	17.6	0.244	0.976	
Cobalt	9.87	0.244	0.976	
Copper	24.9	0.488	0.976	
Lead	44.9	0.488	0.976	
Molybdenum	ND	0.244	0.976	
Nickel	11.4	0.244	0.976	
Selenium	ND	0.732	0.976	
Silver	ND	0.244	0.976	
Thallium	ND	0.732	0.976	
Vanadium	32.1	0.244	0.976	
Zinc	115	0.976	0.976	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-002	**14-05-1652-12-A**	**05/21/14 13:16**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:14**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	2.59	0.758	1.01	
Barium	126	0.505	1.01	
Beryllium	0.357	0.253	1.01	
Cadmium	0.772	0.505	1.01	
Chromium	17.8	0.253	1.01	
Cobalt	11.4	0.253	1.01	
Copper	23.1	0.505	1.01	
Lead	26.0	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	12.3	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	35.6	0.253	1.01	
Zinc	221	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-003	**14-05-1652-13-A**	**05/21/14 13:19**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:15**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	6.35	0.743	0.990	
Barium	118	0.495	0.990	
Beryllium	0.597	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	101	0.248	0.990	
Cobalt	9.59	0.248	0.990	
Copper	375	0.495	0.990	
Lead	43.8	0.495	0.990	
Molybdenum	0.548	0.248	0.990	
Nickel	21.6	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	31.7	0.248	0.990	
Zinc	929	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-004	**14-05-1652-14-A**	**05/21/14 13:22**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:16**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	4.43	0.758	1.01	
Barium	129	0.505	1.01	
Beryllium	0.352	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	16.2	0.253	1.01	
Cobalt	11.0	0.253	1.01	
Copper	26.2	0.505	1.01	
Lead	41.3	0.505	1.01	
Molybdenum	0.331	0.253	1.01	
Nickel	13.0	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	35.2	0.253	1.01	
Zinc	152	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-005	**14-05-1652-15-A**	**05/21/14 13:25**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:17**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	5.60	0.750	1.00	
Barium	122	0.500	1.00	
Beryllium	0.374	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	19.0	0.250	1.00	
Cobalt	10.8	0.250	1.00	
Copper	63.6	0.500	1.00	
Lead	11.1	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	12.2	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	32.3	0.250	1.00	
Zinc	182	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 11 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-006	**14-05-1652-16-A**	**05/21/14 13:29**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:18**	**140521L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	4.50	0.743	0.990	
Barium	105	0.495	0.990	
Beryllium	0.303	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	13.5	0.248	0.990	
Cobalt	10.0	0.248	0.990	
Copper	15.3	0.495	0.990	
Lead	1.54	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	10.2	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	30.2	0.248	0.990	
Zinc	50.0	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 12 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-007	**14-05-1652-17-A**	**05/21/14 13:31**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:19**	**140521L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.714	0.952	
Arsenic	21.9	0.714	0.952	
Barium	176	0.476	0.952	
Beryllium	0.390	0.238	0.952	
Cadmium	ND	0.476	0.952	
Chromium	19.2	0.238	0.952	
Cobalt	11.6	0.238	0.952	
Copper	42.8	0.476	0.952	
Lead	175	0.476	0.952	
Molybdenum	ND	0.238	0.952	
Nickel	14.1	0.238	0.952	
Selenium	ND	0.714	0.952	
Silver	ND	0.238	0.952	
Thallium	ND	0.714	0.952	
Vanadium	36.6	0.238	0.952	
Zinc	248	0.952	0.952	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 13 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18404**	**N/A**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 11:54**	**140521L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 14 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18405**	**N/A**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 11:55**	**140521L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1047	**14-05-1652-1-A**	**05/21/14 08:01**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:29**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0969	0.0847	1.00	

#1048	**14-05-1652-2-A**	**05/21/14 08:02**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:31**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

#1049	**14-05-1652-3-A**	**05/21/14 08:03**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:33**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

#1050	**14-05-1652-4-A**	**05/21/14 08:05**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:35**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

#1051	**14-05-1652-5-A**	**05/21/14 08:06**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:38**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

885-IV-R/R-SS-001	**14-05-1652-11-A**	**05/21/14 13:13**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:40**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

885-IV-R/R-SS-002	**14-05-1652-12-A**	**05/21/14 13:16**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:42**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0877	1.00	

885-IV-R/R-SS-003	**14-05-1652-13-A**	**05/21/14 13:19**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:44**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0832	0.0806	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-004	**14-05-1652-14-A**	**05/21/14 13:22**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:47**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0911	0.0847	1.00	

885-IV-R/R-SS-005	**14-05-1652-15-A**	**05/21/14 13:25**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 11:33**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

885-IV-R/R-SS-006	**14-05-1652-16-A**	**05/21/14 13:29**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:49**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

885-IV-R/R-SS-007	**14-05-1652-17-A**	**05/21/14 13:31**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 12:56**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Method Blank	**099-16-272-248**	**N/A**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 11:24**	**140521L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1052-15	**14-05-1652-6-A**	**05/21/14 09:50**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 11:54**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	200	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	124	50-130	

#1053-15	**14-05-1652-7-A**	**05/21/14 10:04**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 12:13**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	50	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	121	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1053-15	**14-05-1652-7-A**	**05/21/14 10:04**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 16:21**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1200	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1054-13.5	**14-05-1652-8-A**	**05/21/14 10:15**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 12:33**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	780	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	53	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	124	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1055-13.5	**14-05-1652-9-A**	**05/21/14 10:26**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 12:52**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	140	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	124	50-130	

DC-429	**14-05-1652-10-A**	**05/21/14 11:47**	**Other**	**GC 31**	**05/21/14**	**05/23/14 13:11**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	270000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	330	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-429	**14-05-1652-10-A**	**05/21/14 11:47**	**Other**	**GC 31**	**05/21/14**	**05/23/14 16:02**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4300000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	6200	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-001	**14-05-1652-11-A**	**05/21/14 13:13**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 13:30**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	61	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-002	**14-05-1652-12-A**	**05/21/14 13:16**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 13:49**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

885-IV-R/R-SS-003	**14-05-1652-13-A**	**05/21/14 13:19**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 14:08**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	510	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	430	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	85	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-004	**14-05-1652-14-A**	**05/21/14 13:22**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 14:27**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

885-IV-R/R-SS-005	**14-05-1652-15-A**	**05/21/14 13:25**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 14:46**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	61	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-006	**14-05-1652-16-A**	**05/21/14 13:29**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 15:05**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	121	50-130	

885-IV-R/R-SS-007	**14-05-1652-17-A**	**05/21/14 13:31**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 15:24**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	118	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-254**	**N/A**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 10:57**	**140521L20**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	118	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1645-1	**Sample**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 13:24**	**140522S01**
14-05-1645-1	**Matrix Spike**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 12:52**	**140522S01**
14-05-1645-1	**Matrix Spike Duplicate**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 13:08**	**140522S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	32.75	400.0	402.4	92	298.1	66	64-130	30	0-15	4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1580-1	**Sample**	**Solid**	**ICP 7300**	**05/21/14**	**05/21/14 19:40**	**140521S03**
14-05-1580-1	**Matrix Spike**	**Solid**	**ICP 7300**	**05/21/14**	**05/21/14 19:45**	**140521S03**
14-05-1580-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/21/14**	**05/21/14 19:46**	**140521S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	10.12	40	9.055	36	50-115	11	0-20	3
Arsenic	3.286	25.00	26.78	94	27.92	99	75-125	4	0-20	
Barium	105.4	25.00	124.9	4X	145.3	4X	75-125	4X	0-20	Q
Beryllium	ND	25.00	25.96	104	25.59	102	75-125	1	0-20	
Cadmium	2.710	25.00	27.54	99	27.37	99	75-125	1	0-20	
Chromium	9.996	25.00	34.08	96	35.31	101	75-125	4	0-20	
Cobalt	7.996	25.00	33.76	103	34.11	104	75-125	1	0-20	
Copper	34.90	25.00	58.14	93	62.38	110	75-125	7	0-20	
Lead	276.7	25.00	283.4	4X	312.7	4X	75-125	4X	0-20	Q
Molybdenum	0.3395	25.00	25.26	100	24.74	98	75-125	2	0-20	
Nickel	11.06	25.00	35.18	96	36.75	103	75-125	4	0-20	
Selenium	ND	25.00	22.44	90	20.89	84	75-125	7	0-20	
Silver	ND	12.50	12.61	101	12.42	99	75-125	2	0-20	
Thallium	ND	25.00	20.02	80	18.52	74	75-125	8	0-20	3
Vanadium	26.76	25.00	48.91	89	52.63	103	75-125	7	0-20	
Zinc	404.4	25.00	179.0	4X	205.9	4X	75-125	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
885-IV-R/R-SS-005	**Sample**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:17**	**140521S04**
885-IV-R/R-SS-005	**Matrix Spike**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:03**	**140521S04**
885-IV-R/R-SS-005	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 12:04**	**140521S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	8.118	32	8.971	36	50-115	10	0-20	3
Arsenic	5.602	25.00	34.84	117	31.05	102	75-125	12	0-20	
Barium	121.5	25.00	146.2	4X	148.0	4X	75-125	4X	0-20	Q
Beryllium	0.3737	25.00	26.76	106	26.24	103	75-125	2	0-20	
Cadmium	ND	25.00	25.88	104	28.88	116	75-125	11	0-20	
Chromium	19.00	25.00	44.54	102	44.80	103	75-125	1	0-20	
Cobalt	10.79	25.00	37.14	105	36.81	104	75-125	1	0-20	
Copper	63.58	25.00	100.3	147	102.6	156	75-125	2	0-20	3
Lead	11.11	25.00	41.88	123	38.22	108	75-125	9	0-20	
Molybdenum	ND	25.00	25.38	102	25.18	101	75-125	1	0-20	
Nickel	12.17	25.00	37.75	102	37.49	101	75-125	1	0-20	
Selenium	ND	25.00	21.47	86	20.27	81	75-125	6	0-20	
Silver	ND	12.50	13.01	104	12.82	103	75-125	1	0-20	
Thallium	ND	25.00	20.93	84	19.24	77	75-125	8	0-20	
Vanadium	32.29	25.00	58.35	104	58.61	105	75-125	0	0-20	
Zinc	181.9	25.00	190.3	4X	208.2	4X	75-125	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
885-IV-R/R-SS-005	**Sample**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 11:33**	**140521S09**
885-IV-R/R-SS-005	**Matrix Spike**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 11:35**	**140521S09**
885-IV-R/R-SS-005	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 11:38**	**140521S09**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8326	100	0.7922	95	71-137	5	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1054-13.5	**Sample**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 12:33**	**140521S20**
#1054-13.5	**Matrix Spike**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 11:16**	**140521S20**
#1054-13.5	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 11:35**	**140521S20**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	257.6	258	247.7	248	50-135	4	0-25	3
Aroclor-1260	52.76	100.0	185.8	133	158.5	106	50-135	16	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-920	**LCS**	**Solid**	**GC 49**	**05/22/14**	**05/22/14 12:35**	**140522B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	317.5	79	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18404	**LCS**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 11:56**	**140521L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.20	101	80-120	73-127	
Arsenic	25.00	24.57	98	80-120	73-127	
Barium	25.00	24.90	100	80-120	73-127	
Beryllium	25.00	24.36	97	80-120	73-127	
Cadmium	25.00	25.76	103	80-120	73-127	
Chromium	25.00	24.70	99	80-120	73-127	
Cobalt	25.00	27.83	111	80-120	73-127	
Copper	25.00	26.60	106	80-120	73-127	
Lead	25.00	25.91	104	80-120	73-127	
Molybdenum	25.00	25.63	103	80-120	73-127	
Nickel	25.00	26.20	105	80-120	73-127	
Selenium	25.00	22.80	91	80-120	73-127	
Silver	12.50	12.67	101	80-120	73-127	
Thallium	25.00	26.73	107	80-120	73-127	
Vanadium	25.00	24.11	96	80-120	73-127	
Zinc	25.00	26.32	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18405	**LCS**	**Solid**	**ICP 7300**	**05/21/14**	**05/22/14 11:58**	**140521L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.04	100	80-120	73-127	
Arsenic	25.00	23.87	95	80-120	73-127	
Barium	25.00	25.01	100	80-120	73-127	
Beryllium	25.00	24.44	98	80-120	73-127	
Cadmium	25.00	25.79	103	80-120	73-127	
Chromium	25.00	24.84	99	80-120	73-127	
Cobalt	25.00	27.77	111	80-120	73-127	
Copper	25.00	26.56	106	80-120	73-127	
Lead	25.00	25.54	102	80-120	73-127	
Molybdenum	25.00	25.23	101	80-120	73-127	
Nickel	25.00	26.30	105	80-120	73-127	
Selenium	25.00	22.58	90	80-120	73-127	
Silver	12.50	12.67	101	80-120	73-127	
Thallium	25.00	26.18	105	80-120	73-127	
Vanadium	25.00	24.23	97	80-120	73-127	
Zinc	25.00	26.29	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-248	**LCS**	**Solid**	**Mercury 05**	**05/21/14**	**05/22/14 11:26**	**140521L09**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8567	103	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-254	**LCS**	**Solid**	**GC 31**	**05/21/14**	**05/23/14 10:38**	**140521L20**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	116.4	116	50-135	
Aroclor-1260	100.0	115.3	115	60-130	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-1652

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	776	Mercury 05	1
EPA 8015B (M)	EPA 3550B	628	GC 49	1
EPA 8082	EPA 3540C	669	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-1652

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31340

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 5-21-14 PAGE 1 OF 2

PROJECT NUMBER: 0106270030

LABORATORY NAME: ~~AMEC~~ CalScience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

14-05-1652

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	Title 22 Metals	EPA 8082	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-21-14	0801	#1047	X			4 oz glass jar	S			X		1	
2		0802	#1048	X				S			X		1	
3		0803	#1049	X				S			X		1	
4		0805	#1050	X				S			X		1	
5		0806	#1051	X				S			X		1	
6		0950	#1052-15		X			S			X		1	
7		1004	#1053-15		X			S			X		1	
8		1015	#1054-13.5		X			S			X		1	
9		1026	#1055-13.5		X			S			X		1	
10		1147	DC-429		X			O			X		1	concrete
11		1313	885-IV-R/R-SS-001	X	X	X		S			X		1	
12		1316	885-IV-R/R-SS-002	X	X	X		S			X		1	
13		1319	885-IV-R/R-SS-003	X	X	X		S			X		1	
14		1322	885-IV-R/R-SS-004	X	X	X		S			X		1	
15		1325	885-IV-R/R-SS-005	X	X	X		S			X		1	

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS:

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	5/21/14	1608	SIGNATURE: [illegible] PRINTED NAME: Alex Marquez COMPANY: CEL	5/21/14	1609
SIGNATURE: [illegible] PRINTED NAME: Alex Marquez COMPANY: CEL	5/21/14	1835	SIGNATURE: [illegible] PRINTED NAME: Yau Liao COMPANY: CEL	5/21/14	1835
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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NB 31341

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 5-21-14

PAGE 2 OF 2

PROJECT NUMBER: 01062700 30

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	Title 22 Metals	EPA 8082	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	5-21-14	1329	885-IV-R/R-SS-006	X	X	X	4 oz glass jar	S			X		1	
17	↓	1331	885-IV-R/R-SS-007	X	X	X	↓	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	5/21/14	1608	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEC	5/21/14	1608
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEC	5/21/14	1835	SIGNATURE: PRINTED NAME: COMPANY: CEC	5/21/14	1835
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 2/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1652

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/21/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
* ☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels. (-2) to (-15)			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

* Collection date per label is 5/21/14

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-05-1652

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/09/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-05-1652

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-1652 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/21/14. They were assigned to Work Order 14-05-1652.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	05/21/14 18:35
		Number of Containers:	17
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
885-IV-R/R-SS-007	14-05-1652-17	05/21/14 13:31	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1652
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/21/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-007 (14-05-1652-17)						
Lead	1.16		0.100	mg/L	EPA 6010B	EPA 1311
Lead	10.5		0.100	mg/L	EPA 6010B	T22.11.5. AII

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-007	**14-05-1652-17-A**	**05/21/14 13:31**	**Solid**	**ICP 7300**	**06/02/14**	**06/09/14 12:38**	**140604LA2**

Parameter	Result	RL	DF	Qualifiers
Lead	10.5	0.100	1.00	

Method Blank	**097-05-006-7285**	**N/A**	**Aqueous**	**ICP 7300**	**06/02/14**	**06/04/14 15:25**	**140604LA2**

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-007	**14-05-1652-17-A**	**05/21/14 13:31**	**Solid**	**ICP 7300**	**06/02/14**	**06/03/14 17:41**	**140603LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	1.16	0.100	1.00	

Method Blank	**099-14-021-1216**	**N/A**	**Aqueous**	**ICP 7300**	**06/02/14**	**06/03/14 17:31**	**140603LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0165-1	**Sample**	**Aqueous**	**ICP 7300**	**06/04/14**	**06/04/14 15:33**	**140604SA2**
14-06-0165-1	**Matrix Spike**	**Aqueous**	**ICP 7300**	**06/04/14**	**06/04/14 15:35**	**140604SA2**
14-06-0165-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP 7300**	**06/04/14**	**06/04/14 15:37**	**140604SA2**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	ND	5.000	5.755	115	5.627	113	75-125	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1580-4	**Sample**	**Solid**	**ICP 7300**	**06/02/14**	**06/03/14 17:34**	**140603SA1**
14-05-1580-4	**Matrix Spike**	**Solid**	**ICP 7300**	**06/02/14**	**06/03/14 17:36**	**140603SA1**
14-05-1580-4	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/02/14**	**06/03/14 17:38**	**140603SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	0.8782	5.000	6.183	106	6.033	103	84-120	2	0-7	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7285	**LCS**	**Aqueous**	**ICP 7300**	**06/02/14**	**06/04/14 15:31**	**140604LA2**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Lead	5.000	5.329	107	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/21/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1652
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-021-1216	**LCS**	**Aqueous**	**ICP 7300**	**06/02/14**	**06/03/14 17:33**	**140603LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Lead	5.000	5.354	107	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-1652

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 1311	469	ICP 7300	1
EPA 6010B	T22.11.5. AII	469	ICP 7300	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-1652

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Stephen Nowak [snowak@calscience.com]
Sent: Monday, June 02, 2014 9:51 AM
To: Stephen Nowak
Subject: Fwd: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-05-1652

Sent from my iPhone

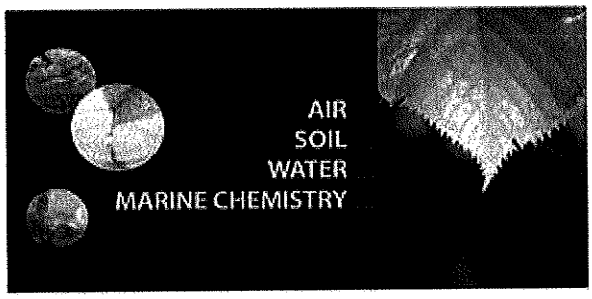
Begin forwarded message:

> **From:** "Holland, Kim" <Kim.Holland@amec.com>
> **Date:** June 2, 2014 at 8:25:00 AM PDT
> **To:** Stephen Nowak <snowak@calscience.com>
> **Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-05-1652**
>
> Please analyze sample 885-IV-R/R-SS-007 for Pb STLC and TCLP. Five day turnaround is ok on this one. Thanks.
>
> ---
>
> **From:** Stephen Nowak [snowak@calscience.com]
> **Sent:** Friday, May 23, 2014 5:40 PM
> **To:** Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
> **Subject:** Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-05-1652
>
> Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience

7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
www.calscience.com



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CHAIN-OF-CUSTODY RECORD

NB 31340

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 5-21-14 PAGE 1 OF 2

PROJECT NUMBER: 0106270030

LABORATORY NAME: CalScience ~~AMEC~~

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

14-05-1652

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

GEOTRACKER REQUIRED YES (NO)

LABORATORY PHONE NUMBER:

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	Title 22 Metals	EPA 8082	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-21-14	0801	#1047	X			4 oz glass jar	S			X		1	
2		0802	#1048	X				S			X		1	
3		0803	#1049	X				S			X		1	
4		0805	#1050	X				S			X		1	
5		0806	#1051	X				S			X		1	
6		0950	#1052-15		X			S			X		1	
7		1004	#1053-15		X			S			X		1	
8		1015	#1054-13.5		X			S			X		1	
9		1026	#1055-13.5		X			S			X		1	
10		1147	DC-429		X			O			X		1	concrete
11		1313	885-IV-R/R-SS-001	X	X	X		S			X		1	
12		1316	885-IV-R/R-SS-002	X	X	X		S			X		1	
13		1319	885-IV-R/R-SS-003	X	X	X		S			X		1	
14		1322	885-IV-R/R-SS-004	X	X	X		S			X		1	
15		1325	885-IV-R/R-SS-005	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	5/21/14	1608	SIGNATURE: [illegible] PRINTED NAME: Alex Marquez COMPANY: CEL	5/21/14	1608
SIGNATURE: [illegible] PRINTED NAME: Alex Marquez COMPANY: CEL	5/21/14	1835	SIGNATURE: [illegible] PRINTED NAME: Yau Liao COMPANY: CEL	5/21/14	1835
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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NB 31341

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 5-21-14

PAGE 2 OF 2

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED: YES / NO (NO circled)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	Title 22 Metals	EPA 8082	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	5-21-14	1329	885-IV-R/R-SS-006	X	X	X	4 oz glass jar	S			X		1	
17	↓	1331	885-IV-R/R-SS-007	X	X	X	↓	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	5/21/14	1608	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEC	5/21/14	1608
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: CEC	5/21/14	1835	SIGNATURE: PRINTED NAME: COMPANY: CEC	5/21/14	1835
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 2/17

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1652

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/21/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
* ☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels. (-2) to (-15)			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

* Collection date per label is 5/21/14

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-1935

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 05/29/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-05-1935

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5.1 MS/MSD. 11
5.2 LCS/LCSD. 12

6 Sample Analysis Summary. 13

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8 Chain of Custody/Sample Receipt Form. 15

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-1935 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/27/14. They were assigned to Work Order 14-05-1935.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1935
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	05/27/14 16:15
		Number of Containers:	8
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
827-IV-P/S-CS-003	14-05-1935-1	05/27/14 07:32	1	Concrete
827-IV-P/S-CS-004	14-05-1935-2	05/27/14 07:34	1	Concrete
827-IV-P/S-O-002	14-05-1935-3	05/27/14 07:35	1	Solid
#1061-18.5	14-05-1935-4	05/27/14 11:35	1	Solid
#1062-18.5	14-05-1935-5	05/27/14 11:40	1	Solid
#1063-18.5	14-05-1935-6	05/27/14 11:46	1	Solid
#1065-18.5	14-05-1935-7	05/27/14 11:51	1	Solid
#1064-18.5	14-05-1935-8	05/27/14 11:55	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-1935
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	05/27/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1061-18.5 (14-05-1935-4)						
Aroclor-1248	3600		500	ug/kg	EPA 8082	EPA 3540C
#1062-18.5 (14-05-1935-5)						
Aroclor-1248	500		50	ug/kg	EPA 8082	EPA 3540C
#1063-18.5 (14-05-1935-6)						
Aroclor-1248	480		50	ug/kg	EPA 8082	EPA 3540C
#1065-18.5 (14-05-1935-7)						
Aroclor-1248	1800		250	ug/kg	EPA 8082	EPA 3540C
#1064-18.5 (14-05-1935-8)						
Aroclor-1248	490000		50000	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/27/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1935
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
827-IV-P/S-CS-003	**14-05-1935-1-A**	**05/27/14 07:32**	**Concrete**	**GC 58**	**05/27/14**	**05/28/14 20:15**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

827-IV-P/S-CS-004	**14-05-1935-2-A**	**05/27/14 07:34**	**Concrete**	**GC 58**	**05/27/14**	**05/28/14 20:33**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/27/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1935
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
827-IV-P/S-O-002	**14-05-1935-3-A**	**05/27/14 07:35**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 20:51**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

#1061-18.5	**14-05-1935-4-A**	**05/27/14 11:35**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 21:09**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/27/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1935
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1061-18.5	**14-05-1935-4-A**	**05/27/14 11:35**	**Solid**	**GC 58**	**05/27/14**	**05/29/14 11:08**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3600	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	119	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1062-18.5	**14-05-1935-5-A**	**05/27/14 11:40**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 21:27**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	500	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/27/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1935
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1063-18.5	**14-05-1935-6-A**	**05/27/14 11:46**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 21:45**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	480	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

#1065-18.5	**14-05-1935-7-A**	**05/27/14 11:51**	**Solid**	**GC 58**	**05/27/14**	**05/29/14 11:26**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	250	5.00	
Aroclor-1221	ND	250	5.00	
Aroclor-1232	ND	250	5.00	
Aroclor-1242	ND	250	5.00	
Aroclor-1248	1800	250	5.00	
Aroclor-1254	ND	250	5.00	
Aroclor-1260	ND	250	5.00	
Aroclor-1262	ND	250	5.00	
Aroclor-1268	ND	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/27/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1935
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1064-18.5	**14-05-1935-8-A**	**05/27/14 11:55**	**Solid**	**GC 58**	**05/27/14**	**05/29/14 12:02**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1248	490000	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	ND	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	260	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

Method Blank	**099-02-003-256**	**N/A**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 19:14**	**140527L12**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/27/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1935
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1061-18.5	**Sample**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 21:09**	**140527S12**
#1061-18.5	**Matrix Spike**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 19:32**	**140527S12**
#1061-18.5	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 19:57**	**140527S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	682.8	683	929.2	929	50-135	31	0-25	3,4
Aroclor-1260	ND	100.0	127.0	127	209.8	210	50-135	49	0-25	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/27/14
121 Innovation Drive, Suite 200		Work Order:	14-05-1935
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-256	**LCS**	**Solid**	**GC 58**	**05/27/14**	**05/28/14 18:56**	**140527L12**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	88.63	89	50-135	
Aroclor-1260	100.0	81.78	82	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-1935

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	842	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-1935

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31342

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 5-27-14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-05-1935
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky 8/27/14

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-27-14	0732	827-IV-P/S-CS-003	X	4oz glass jar	O			X		1	concrete
2		0734	827-IV-P/S-CS-004	X		O			X		1	concrete
3		0735	827-IV-P/S-O-002	X		S			X		1	
4		1135	#1061-18.5	X		S			X		1	
5		1140	#1062-18.5	X		S			X		1	
6		1146	#1063-18.5	X		S			X		1	
7		1151	#1065-18.5	X		S			X		1	
8		1155	#1064-18.5	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	5/27/14	1402	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/27/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/27/14	1510	SIGNATURE: PRINTED NAME: D. PAYAN COMPANY: CEL	5/27/14	15:10
SIGNATURE: PRINTED NAME: D. PAYAN COMPANY: CEL	5/27/14	16.15	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: CEL	5/27/14	16:15

TOTAL NUMBER OF CONTAINERS: 8

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1 9 3 5

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/27/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.9 °C - 0.3 °C (CF) = 2.6 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 15

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 15

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-2026

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/02/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Former Pechiney Cast Plate / 0106270030
Work Order Number: 14-05-2026

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-2026 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/28/14. They were assigned to Work Order 14-05-2026.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-2026
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	05/28/14 17:28
		Number of Containers:	10
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
293-IIIA-P/S-SS-001	14-05-2026-1	05/28/14 11:15	1	Solid
293-IIIA-P/S-SS-002	14-05-2026-2	05/28/14 11:17	1	Solid
293-IIIA-P/S-SS-003	14-05-2026-3	05/28/14 11:20	1	Solid
293-IIIA-P/S-SS-004	14-05-2026-4	05/28/14 11:23	1	Solid
293-IIIA-P/S-SS-005	14-05-2026-5	05/28/14 11:25	1	Solid
293-IIIA-P/S-SS-006	14-05-2026-6	05/28/14 11:27	1	Solid
293-IIIA-P/S-SS-007	14-05-2026-7	05/28/14 11:32	1	Solid
293-IIIA-P/S-SS-008	14-05-2026-8	05/28/14 11:34	1	Solid
293-IIIA-P/S-SS-009	14-05-2026-9	05/28/14 11:36	1	Solid
876-IIIB-O-SS-001	14-05-2026-10	05/28/14 13:28	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-2026
		Project Name:	Former Pechiney Cast Plate / 0106270030
		Received:	05/28/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
293-IIIA-P/S-SS-001 (14-05-2026-1)						
Aroclor-1248	3600		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	640		50	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-002 (14-05-2026-2)						
Aroclor-1248	16000		1000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2200		1000	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-003 (14-05-2026-3)						
Aroclor-1248	7100		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	710		50	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-004 (14-05-2026-4)						
Aroclor-1248	4700		510	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	510		51	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-005 (14-05-2026-5)						
Aroclor-1248	22000		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1700		250	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-006 (14-05-2026-6)						
Aroclor-1248	1700		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	220		50	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-007 (14-05-2026-7)						
Aroclor-1248	13000		1000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1200		250	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-008 (14-05-2026-8)						
Aroclor-1248	30000		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2400		250	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-009 (14-05-2026-9)						
Aroclor-1248	3300		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	330		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-001	**14-05-2026-1-A**	**05/28/14 11:15**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 01:13**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	640	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	130	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

293-IIIA-P/S-SS-001	**14-05-2026-1-A**	**05/28/14 11:15**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 12:56**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3600	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	121	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-002	**14-05-2026-2-A**	**05/28/14 11:17**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 01:31**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	159	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

293-IIIA-P/S-SS-002	**14-05-2026-2-A**	**05/28/14 11:17**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 13:14**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	16000	1000	20.0	
Aroclor-1260	2200	1000	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	138	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-003	**14-05-2026-3-A**	**05/28/14 11:20**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 01:49**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	710	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	163	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

293-IIIA-P/S-SS-003	**14-05-2026-3-A**	**05/28/14 11:20**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 13:32**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	7100	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	148	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-004	**14-05-2026-4-A**	**05/28/14 11:23**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 02:07**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	510	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

293-IIIA-P/S-SS-004	**14-05-2026-4-A**	**05/28/14 11:23**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 13:51**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4700	510	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-005	**14-05-2026-5-A**	**05/28/14 11:25**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 02:25**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

293-IIIA-P/S-SS-005	**14-05-2026-5-A**	**05/28/14 11:25**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 14:08**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1260	1700	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

293-IIIA-P/S-SS-005	**14-05-2026-5-A**	**05/28/14 11:25**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 14:26**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	22000	2500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-006	**14-05-2026-6-A**	**05/28/14 11:27**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 02:43**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	220	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

293-IIIA-P/S-SS-006	**14-05-2026-6-A**	**05/28/14 11:27**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 14:44**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1700	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-007	**14-05-2026-7-A**	**05/28/14 11:32**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 03:01**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

293-IIIA-P/S-SS-007	**14-05-2026-7-A**	**05/28/14 11:32**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 15:02**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1260	1200	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

293-IIIA-P/S-SS-007	**14-05-2026-7-A**	**05/28/14 11:32**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 15:20**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	13000	1000	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-008	**14-05-2026-8-A**	**05/28/14 11:34**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 03:19**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

293-IIIA-P/S-SS-008	**14-05-2026-8-A**	**05/28/14 11:34**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 15:38**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1260	2400	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

293-IIIA-P/S-SS-008	**14-05-2026-8-A**	**05/28/14 11:34**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 15:56**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	30000	2500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-009	**14-05-2026-9-A**	**05/28/14 11:36**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 03:37**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	330	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	187	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

293-IIIA-P/S-SS-009	**14-05-2026-9-A**	**05/28/14 11:36**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 16:14**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3300	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	139	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
876-IIIB-O-SS-001	**14-05-2026-10-A**	**05/28/14 13:28**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 03:55**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

Method Blank	**099-02-003-257**	**N/A**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 00:19**	**140528L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
293-IIIA-P/S-SS-003	**Sample**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 01:49**	**140528S11**
293-IIIA-P/S-SS-003	**Matrix Spike**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 00:37**	**140528S11**
293-IIIA-P/S-SS-003	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 00:55**	**140528S11**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	308.1	308	386.5	386	50-135	23	0-25	3
Aroclor-1260	714.2	100.0	476.0	0	505.7	0	50-135	6	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/28/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2026
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-257	**LCS**	**Solid**	**GC 58**	**05/28/14**	**05/30/14 00:01**	**140528L11**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	76.56	77	50-135	
Aroclor-1260	100.0	83.89	84	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-2026

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	842	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-2026

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31344

PROJECT NAME: Former Peehiney Cast Plate Facility

DATE: 5-28-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: 14-05-2026

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky, Stephen Hung

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-28-14	1115	293-IIIA-P/S-SS-001	X	4oz glass jar	S			X		1	
2		1117	293-IIIA-P/S-SS-002	X		S			X		1	
3		1120	293-IIIA-P/S-SS-003	X		S			X		1	
4		1123	293-IIIA-P/S-SS-004	X		S			X		1	
5		1125	293-IIIA-P/S-SS-005	X		S			X		1	
6		1127	293-IIIA-P/S-SS-006	X		S			X		1	
7		1132	293-IIIA-P/S-SS-007	X		S			X		1	
8		1134	293-IIIA-P/S-SS-008	X		S			X		1	
9		1136	293-IIIA-P/S-SS-009	X		S			X		1	
10		1328	896-IIIB-O-SS-001	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	5/28/14	1726	SIGNATURE:	5/28/14	1726
PRINTED NAME: Stephen Hung			PRINTED NAME: Arthur Young		
COMPANY: AMEC			COMPANY: CALSCIENCE		
SIGNATURE:	5/28/14	1728	SIGNATURE: Danny Le	5/28/14	17:28
PRINTED NAME: Arthur Young			PRINTED NAME: DANNY LE		
COMPANY: CALSCIENCE			COMPANY: CSL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 10

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-2026

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/28/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.4 °C - 0.3 °C (CF) = 3.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 803

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 803

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 806

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 806

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 806

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-2144

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/02/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-05-2144

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-2144 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/29/14. They were assigned to Work Order 14-05-2144.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-2144
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	05/29/14 18:00
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
876-IIIB-O-SS-002	14-05-2144-1	05/29/14 08:42	1	Solid
#1066	14-05-2144-2	05/29/14 11:04	1	Solid
#1067	14-05-2144-3	05/29/14 11:06	1	Solid
#1068	14-05-2144-4	05/29/14 11:12	1	Solid
#1069	14-05-2144-5	05/29/14 11:15	1	Solid
#1070	14-05-2144-6	05/29/14 11:18	1	Solid
#1071	14-05-2144-7	05/29/14 11:22	1	Solid
#1072	14-05-2144-8	05/29/14 11:25	1	Solid
#1073	14-05-2144-9	05/29/14 11:26	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-2144
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/29/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1066 (14-05-2144-2)						
Barium	0.644		0.505	mg/kg	EPA 6010B	EPA 3050B
Chromium	0.334		0.253	mg/kg	EPA 6010B	EPA 3050B
Lead	1.50		0.505	mg/kg	EPA 6010B	EPA 3050B
Nickel	0.288		0.253	mg/kg	EPA 6010B	EPA 3050B
Vanadium	0.314		0.253	mg/kg	EPA 6010B	EPA 3050B
Zinc	27.4		1.01	mg/kg	EPA 6010B	EPA 3050B
C19-C20	16000		10000	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	19000		10000	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	15000		10000	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	53000		10000	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	55000		10000	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	33000		10000	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	33000		10000	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	17000		10000	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	240000		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-2144
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/29/14
Attn:	Linda Conlan		Page 2 of 7

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1067 (14-05-2144-3)						
Arsenic	12.7		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	153		0.493	mg/kg	EPA 6010B	EPA 3050B
Chromium	41.6		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	14.2		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	117		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	161		0.493	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.629		0.246	mg/kg	EPA 6010B	EPA 3050B
Nickel	113		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	23.0		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	266		0.985	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.155		0.0820	mg/kg	EPA 7471A	EPA 7471A Total
C9-C10	94		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	760		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	970		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	280		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	240		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	260		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	320		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	420		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	430		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	590		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	230		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	140		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	97		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	4800		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-2144
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/29/14
Attn:	Linda Conlan		Page 3 of 7

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1068 (14-05-2144-4)						
Arsenic	15.4		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	148		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.286		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	42.4		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	15.8		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	101		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	79.5		0.498	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.721		0.249	mg/kg	EPA 6010B	EPA 3050B
Nickel	301		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.5		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	222		0.995	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.262		0.0781	mg/kg	EPA 7471A	EPA 7471A Total
C13-C14	1700		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	3400		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	3000		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	4000		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	4500		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	4300		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	6100		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	1200		1000	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	31000		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-2144
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/29/14
Attn:	Linda Conlan		Page 4 of 7

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1069 (14-05-2144-5)						
Arsenic	2.67		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	166		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.356		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	20.8		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.9		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	108		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	109		0.498	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.398		0.249	mg/kg	EPA 6010B	EPA 3050B
Nickel	21.6		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.4		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	166		0.995	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.153		0.0847	mg/kg	EPA 7471A	EPA 7471A Total
C21-C22	19		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	37		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	57		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	22		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	170		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-2144
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/29/14
Attn:	Linda Conlan		Page 5 of 7

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1070 (14-05-2144-6)						
Antimony	293		0.754	mg/kg	EPA 6010B	EPA 3050B
Arsenic	39.9		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	3520		0.503	mg/kg	EPA 6010B	EPA 3050B
Cadmium	16.5		0.503	mg/kg	EPA 6010B	EPA 3050B
Chromium	123		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	38.4		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	1250		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	13500		50.3	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	4.51		0.251	mg/kg	EPA 6010B	EPA 3050B
Nickel	405		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	22.4		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	12500		101	mg/kg	EPA 6010B	EPA 3050B
Mercury	4.16		0.820	mg/kg	EPA 7471A	EPA 7471A Total
C21-C22	130		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	25		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	230		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	330		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	41		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	990		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	490		50	ug/kg	EPA 8082	EPA 3540C

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-2144
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/29/14
Attn:	Linda Conlan		Page 6 of 7

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1071 (14-05-2144-7)						
Antimony	24.8		0.743	mg/kg	EPA 6010B	EPA 3050B
Arsenic	14.0		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	688		0.495	mg/kg	EPA 6010B	EPA 3050B
Cadmium	4.18		0.495	mg/kg	EPA 6010B	EPA 3050B
Chromium	138		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	33.8		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	933		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	1610		0.495	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	5.69		0.248	mg/kg	EPA 6010B	EPA 3050B
Nickel	276		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	25.4		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	2650		0.990	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.735		0.0806	mg/kg	EPA 7471A	EPA 7471A Total
C23-C24	37		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	25		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	48		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	8.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	120		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1072 (14-05-2144-8)						
Barium	79.7		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.360		0.251	mg/kg	EPA 6010B	EPA 3050B
Chromium	9.92		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	2.61		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	75.7		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	88.5		0.503	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.522		0.251	mg/kg	EPA 6010B	EPA 3050B
Nickel	18.8		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	3.47		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	233		1.01	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.392		0.0781	mg/kg	EPA 7471A	EPA 7471A Total
C25-C28	9.2		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	10		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	6.5		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	41		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-2144
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/29/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1073 (14-05-2144-9)						
Antimony	2050		0.746	mg/kg	EPA 6010B	EPA 3050B
Arsenic	32.8		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	202		0.498	mg/kg	EPA 6010B	EPA 3050B
Chromium	21.5		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.66		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	198		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	16100		49.8	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	1.29		0.249	mg/kg	EPA 6010B	EPA 3050B
Nickel	25.2		0.249	mg/kg	EPA 6010B	EPA 3050B
Silver	0.617		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	27.3		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	389		0.995	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.297		0.0806	mg/kg	EPA 7471A	EPA 7471A Total
C29-C32	32		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	38		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	72		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	180		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1066	**14-05-2144-2-A**	**05/29/14 11:04**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 18:23**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	10000	100	
C7	ND	10000	100	
C8	ND	10000	100	
C9-C10	ND	10000	100	
C11-C12	ND	10000	100	
C13-C14	ND	10000	100	
C15-C16	ND	10000	100	
C17-C18	ND	10000	100	
C19-C20	16000	10000	100	
C21-C22	19000	10000	100	
C23-C24	15000	10000	100	
C25-C28	53000	10000	100	
C29-C32	55000	10000	100	
C33-C36	33000	10000	100	
C37-C40	33000	10000	100	
C41-C44	17000	10000	100	
C6-C44 Total	240000	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	133	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1067	**14-05-2144-3-A**	**05/29/14 11:06**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 18:40**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	94	25	5.00	
C11-C12	760	25	5.00	
C13-C14	970	25	5.00	
C15-C16	280	25	5.00	
C17-C18	240	25	5.00	
C19-C20	260	25	5.00	
C21-C22	320	25	5.00	
C23-C24	420	25	5.00	
C25-C28	430	25	5.00	
C29-C32	590	25	5.00	
C33-C36	230	25	5.00	
C37-C40	140	25	5.00	
C41-C44	97	25	5.00	
C6-C44 Total	4800	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1068	**14-05-2144-4-A**	**05/29/14 11:12**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 18:05**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	1000	20.0	
C7	ND	1000	20.0	
C8	ND	1000	20.0	
C9-C10	ND	1000	20.0	
C11-C12	ND	1000	20.0	
C13-C14	1700	1000	20.0	
C15-C16	ND	1000	20.0	
C17-C18	ND	1000	20.0	
C19-C20	3400	1000	20.0	
C21-C22	3000	1000	20.0	
C23-C24	4000	1000	20.0	
C25-C28	4500	1000	20.0	
C29-C32	4300	1000	20.0	
C33-C36	6100	1000	20.0	
C37-C40	ND	1000	20.0	
C41-C44	1200	1000	20.0	
C6-C44 Total	31000	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	108	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1069	**14-05-2144-5-A**	**05/29/14 11:15**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 17:30**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	19	5.0	1.00	
C23-C24	14	5.0	1.00	
C25-C28	37	5.0	1.00	
C29-C32	57	5.0	1.00	
C33-C36	22	5.0	1.00	
C37-C40	17	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	170	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1070	**14-05-2144-6-A**	**05/29/14 11:18**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 18:57**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	ND	25	5.00	
C11-C12	ND	25	5.00	
C13-C14	ND	25	5.00	
C15-C16	ND	25	5.00	
C17-C18	ND	25	5.00	
C19-C20	ND	25	5.00	
C21-C22	130	25	5.00	
C23-C24	25	25	5.00	
C25-C28	230	25	5.00	
C29-C32	330	25	5.00	
C33-C36	120	25	5.00	
C37-C40	120	25	5.00	
C41-C44	41	25	5.00	
C6-C44 Total	990	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	78	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1071	**14-05-2144-7-A**	**05/29/14 11:22**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 17:12**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	37	5.0	1.00	
C25-C28	25	5.0	1.00	
C29-C32	48	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	8.2	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	120	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	61	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1072	**14-05-2144-8-A**	**05/29/14 11:25**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 15:44**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	9.2	4.9	1.00	
C29-C32	10	4.9	1.00	
C33-C36	6.5	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	41	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1073	**14-05-2144-9-A**	**05/29/14 11:26**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 19:14**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	ND	25	5.00	
C11-C12	ND	25	5.00	
C13-C14	ND	25	5.00	
C15-C16	ND	25	5.00	
C17-C18	ND	25	5.00	
C19-C20	ND	25	5.00	
C21-C22	ND	25	5.00	
C23-C24	ND	25	5.00	
C25-C28	ND	25	5.00	
C29-C32	32	25	5.00	
C33-C36	38	25	5.00	
C37-C40	72	25	5.00	
C41-C44	ND	25	5.00	
C6-C44 Total	180	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-932**	**N/A**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 12:32**	**140530B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1066	**14-05-2144-2-A**	**05/29/14 11:04**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:55**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.758	1.01	
Arsenic	ND	0.758	1.01	
Barium	0.644	0.505	1.01	
Beryllium	ND	0.253	1.01	
Cadmium	ND	0.505	1.01	
Chromium	0.334	0.253	1.01	
Cobalt	ND	0.253	1.01	
Copper	ND	0.505	1.01	
Lead	1.50	0.505	1.01	
Molybdenum	ND	0.253	1.01	
Nickel	0.288	0.253	1.01	
Selenium	ND	0.758	1.01	
Silver	ND	0.253	1.01	
Thallium	ND	0.758	1.01	
Vanadium	0.314	0.253	1.01	
Zinc	27.4	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1067	**14-05-2144-3-A**	**05/29/14 11:06**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:56**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	12.7	0.739	0.985	
Barium	153	0.493	0.985	
Beryllium	ND	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	41.6	0.246	0.985	
Cobalt	14.2	0.246	0.985	
Copper	117	0.493	0.985	
Lead	161	0.493	0.985	
Molybdenum	0.629	0.246	0.985	
Nickel	113	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	23.0	0.246	0.985	
Zinc	266	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1068	**14-05-2144-4-A**	**05/29/14 11:12**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:58**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	15.4	0.746	0.995	
Barium	148	0.498	0.995	
Beryllium	0.286	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	42.4	0.249	0.995	
Cobalt	15.8	0.249	0.995	
Copper	101	0.498	0.995	
Lead	79.5	0.498	0.995	
Molybdenum	0.721	0.249	0.995	
Nickel	301	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	28.5	0.249	0.995	
Zinc	222	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1069	**14-05-2144-5-A**	**05/29/14 11:15**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:59**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	2.67	0.746	0.995	
Barium	166	0.498	0.995	
Beryllium	0.356	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	20.8	0.249	0.995	
Cobalt	11.9	0.249	0.995	
Copper	108	0.498	0.995	
Lead	109	0.498	0.995	
Molybdenum	0.398	0.249	0.995	
Nickel	21.6	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	33.4	0.249	0.995	
Zinc	166	0.995	0.995	

#1070	**14-05-2144-6-A**	**05/29/14 11:18**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 17:04**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	293	0.754	1.01	
Arsenic	39.9	0.754	1.01	
Barium	3520	0.503	1.01	
Beryllium	ND	0.251	1.01	
Cadmium	16.5	0.503	1.01	
Chromium	123	0.251	1.01	
Cobalt	38.4	0.251	1.01	
Copper	1250	0.503	1.01	
Molybdenum	4.51	0.251	1.01	
Nickel	405	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	22.4	0.251	1.01	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1070	**14-05-2144-6-A**	**05/29/14 11:18**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 17:24**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Lead	13500	50.3	101	
Zinc	12500	101	101	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1071	**14-05-2144-7-A**	**05/29/14 11:22**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 17:05**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	24.8	0.743	0.990	
Arsenic	14.0	0.743	0.990	
Barium	688	0.495	0.990	
Beryllium	ND	0.248	0.990	
Cadmium	4.18	0.495	0.990	
Chromium	138	0.248	0.990	
Cobalt	33.8	0.248	0.990	
Copper	933	0.495	0.990	
Lead	1610	0.495	0.990	
Molybdenum	5.69	0.248	0.990	
Nickel	276	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	25.4	0.248	0.990	
Zinc	2650	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1072	**14-05-2144-8-A**	**05/29/14 11:25**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 17:06**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	ND	0.754	1.01	
Barium	79.7	0.503	1.01	
Beryllium	0.360	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	9.92	0.251	1.01	
Cobalt	2.61	0.251	1.01	
Copper	75.7	0.503	1.01	
Lead	88.5	0.503	1.01	
Molybdenum	0.522	0.251	1.01	
Nickel	18.8	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	3.47	0.251	1.01	
Zinc	233	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1073	**14-05-2144-9-A**	**05/29/14 11:26**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 17:07**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	2050	0.746	0.995	
Arsenic	32.8	0.746	0.995	
Barium	202	0.498	0.995	
Beryllium	ND	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	21.5	0.249	0.995	
Cobalt	9.66	0.249	0.995	
Copper	198	0.498	0.995	
Molybdenum	1.29	0.249	0.995	
Nickel	25.2	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	0.617	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	27.3	0.249	0.995	
Zinc	389	0.995	0.995	

#1073	**14-05-2144-9-A**	**05/29/14 11:26**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 17:26**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Lead	16100	49.8	99.5	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18425**	**N/A**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:33**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1066	**14-05-2144-2-A**	**05/29/14 11:04**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 20:55**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

#1067	**14-05-2144-3-A**	**05/29/14 11:06**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 20:57**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.155	0.0820	1.00	

#1068	**14-05-2144-4-A**	**05/29/14 11:12**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 20:59**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.262	0.0781	1.00	

#1069	**14-05-2144-5-A**	**05/29/14 11:15**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 21:01**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.153	0.0847	1.00	

#1070	**14-05-2144-6-A**	**05/29/14 11:18**	**Solid**	**Mercury 04**	**05/29/14**	**05/30/14 16:07**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	4.16	0.820	10.0	

#1071	**14-05-2144-7-A**	**05/29/14 11:22**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 21:06**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.735	0.0806	1.00	

#1072	**14-05-2144-8-A**	**05/29/14 11:25**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 21:08**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.392	0.0781	1.00	

#1073	**14-05-2144-9-A**	**05/29/14 11:26**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 21:10**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.297	0.0806	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-268**	**N/A**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 20:23**	**140529L06**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1066	**14-05-2144-2-A**	**05/29/14 11:04**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 10:51**	**140529L13**

Comment(s): - The reporting limit is elevated resulting from matrix interference.

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	1.00	
Aroclor-1221	ND	500	1.00	
Aroclor-1232	ND	500	1.00	
Aroclor-1242	ND	500	1.00	
Aroclor-1248	ND	500	1.00	
Aroclor-1254	ND	500	1.00	
Aroclor-1260	ND	500	1.00	
Aroclor-1262	ND	500	1.00	
Aroclor-1268	ND	500	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	62	60-125	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

#1067	**14-05-2144-3-A**	**05/29/14 11:06**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 11:09**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	128	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1068	**14-05-2144-4-A**	**05/29/14 11:12**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 11:44**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

#1069	**14-05-2144-5-A**	**05/29/14 11:15**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 12:02**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1070	**14-05-2144-6-A**	**05/29/14 11:18**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 21:08**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	490	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

#1071	**14-05-2144-7-A**	**05/29/14 11:22**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 12:37**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1072	**14-05-2144-8-A**	**05/29/14 11:25**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 12:56**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

#1073	**14-05-2144-9-A**	**05/29/14 11:26**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 13:14**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-258**	**N/A**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 09:57**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-2145-5	**Sample**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 13:58**	**140530S01**
14-05-2145-5	**Matrix Spike**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 13:06**	**140530S01**
14-05-2145-5	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 13:23**	**140530S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	412.1	103	409.0	102	64-130	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-2145-10	**Sample**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:52**	**140529S02**
14-05-2145-10	**Matrix Spike**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:36**	**140529S02**
14-05-2145-10	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:37**	**140529S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	15.47	62	12.33	49	50-115	23	0-20	3,4
Arsenic	1.219	25.00	27.13	104	28.68	110	75-125	6	0-20	
Barium	131.1	25.00	161.1	4X	173.3	4X	75-125	4X	0-20	Q
Beryllium	0.3484	25.00	26.72	105	27.25	108	75-125	2	0-20	
Cadmium	ND	25.00	25.33	101	25.77	103	75-125	2	0-20	
Chromium	15.46	25.00	42.54	108	44.62	117	75-125	5	0-20	
Cobalt	10.83	25.00	37.20	105	39.20	113	75-125	5	0-20	
Copper	15.54	25.00	42.86	109	45.73	121	75-125	6	0-20	
Lead	1.288	25.00	25.84	98	26.73	102	75-125	3	0-20	
Molybdenum	ND	25.00	25.48	102	25.85	103	75-125	1	0-20	
Nickel	11.78	25.00	37.73	104	39.89	112	75-125	6	0-20	
Selenium	ND	25.00	21.76	87	22.64	91	75-125	4	0-20	
Silver	ND	12.50	13.14	105	13.29	106	75-125	1	0-20	
Thallium	ND	25.00	19.65	79	20.00	80	75-125	2	0-20	
Vanadium	33.18	25.00	63.20	120	65.64	130	75-125	4	0-20	3
Zinc	46.60	25.00	72.94	105	76.97	122	75-125	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1968-1	**Sample**	**Sediment**	**Mercury 04**	**05/29/14**	**05/29/14 20:28**	**140529S06**
14-05-1968-1	**Matrix Spike**	**Sediment**	**Mercury 04**	**05/29/14**	**05/29/14 20:30**	**140529S06**
14-05-1968-1	**Matrix Spike Duplicate**	**Sediment**	**Mercury 04**	**05/29/14**	**05/29/14 20:32**	**140529S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.1071	0.8350	0.9001	95	0.9719	104	76-136	8	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1071	**Sample**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 12:37**	**140529S13**
#1071	**Matrix Spike**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 15:19**	**140529S13**
#1071	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 15:37**	**140529S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	78.62	79	85.64	86	50-135	9	0-25	
Aroclor-1260	ND	100.0	100.3	100	85.54	86	50-135	16	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-932	**LCS**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 12:49**	**140530B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	348.4	87	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18425	**LCS**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:34**	**140529L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.81	107	80-120	73-127	
Arsenic	25.00	25.81	103	80-120	73-127	
Barium	25.00	26.81	107	80-120	73-127	
Beryllium	25.00	25.57	102	80-120	73-127	
Cadmium	25.00	26.52	106	80-120	73-127	
Chromium	25.00	26.86	107	80-120	73-127	
Cobalt	25.00	28.75	115	80-120	73-127	
Copper	25.00	25.84	103	80-120	73-127	
Lead	25.00	26.56	106	80-120	73-127	
Molybdenum	25.00	26.70	107	80-120	73-127	
Nickel	25.00	28.18	113	80-120	73-127	
Selenium	25.00	23.08	92	80-120	73-127	
Silver	12.50	13.10	105	80-120	73-127	
Thallium	25.00	27.95	112	80-120	73-127	
Vanadium	25.00	25.81	103	80-120	73-127	
Zinc	25.00	26.32	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-268	**LCS**	**Solid**	**Mercury 04**	**05/29/14**	**05/29/14 20:25**	**140529L06**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.9030	108	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-258	**LCS**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 10:15**	**140529L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	98.11	98	50-135	
Aroclor-1260	100.0	96.14	96	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-2144

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 04	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8082	EPA 3540C	421	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-2144

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31345

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 5-29-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-05-2144

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	HOLD	EPA 8015	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-29-14	0842	876-IIIB-0-SS-002		X			4 oz glass jar	S			X		1	
2		1104	#1066	X		X	X		O			X		1	
3		1106	#1067	X		X	X		S			X		1	
4		1112	#1068	X		X	X		S			X		1	
5		1115	#1069	X		X	X		S			X		1	
6		1118	#1070	X		X	X		S			X		1	
7		1122	#1071	X		X	X		S			X		1	
8		1125	#1072	X			X		O			X		1	
9		1126	#1073	X		X	X		S			X		1	
10		~~1258~~	~~885-IV~~												
		1302													

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	5/29/14	1400	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/29/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/29/14	1530	SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1530
SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1800	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	5/29/14	1800

TOTAL NUMBER OF CONTAINERS: 9

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-2144

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/29/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.3 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-05-2144

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/06/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Former Pechiney Cast Plate / 0106270030
Work Order Number: 14-05-2144

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-2144 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/29/14. They were assigned to Work Order 14-05-2144.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-2144
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	05/29/14 18:00
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1067	14-05-2144-3	05/29/14 11:06	1	Solid
#1068	14-05-2144-4	05/29/14 11:12	1	Solid
#1069	14-05-2144-5	05/29/14 11:15	1	Solid
#1070	14-05-2144-6	05/29/14 11:18	1	Solid
#1071	14-05-2144-7	05/29/14 11:22	1	Solid
#1072	14-05-2144-8	05/29/14 11:25	1	Solid
#1073	14-05-2144-9	05/29/14 11:26	1	Solid

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1067	**14-05-2144-3-A**	**05/29/14 11:06**	**Solid**	**ICP 7300**	**06/03/14**	**06/05/14 18:03**	**140605LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	8.97	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1068	**14-05-2144-4-A**	**05/29/14 11:12**	**Solid**	**ICP 7300**	**06/03/14**	**06/05/14 18:04**	**140605LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	3.24	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1069	**14-05-2144-5-A**	**05/29/14 11:15**	**Solid**	**ICP 7300**	**06/03/14**	**06/05/14 18:10**	**140605LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	62.4	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1072	**14-05-2144-8-A**	**05/29/14 11:25**	**Solid**	**ICP 7300**	**06/03/14**	**06/05/14 18:12**	**140605LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-05-006-7287**	**N/A**	**Aqueous**	**ICP 7300**	**06/03/14**	**06/05/14 17:49**	**140605LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1067	**14-05-2144-3-A**	**05/29/14 11:06**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 15:49**	**140604LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	0.944	0.100	1.00	

#1070	**14-05-2144-6-A**	**05/29/14 11:18**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 15:55**	**140604LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	6.55	0.100	1.00	

#1071	**14-05-2144-7-A**	**05/29/14 11:22**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 15:57**	**140604LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	9.72	0.100	1.00	

#1073	**14-05-2144-9-A**	**05/29/14 11:26**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 15:59**	**140604LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	2.81	0.100	1.00	

Method Blank	**099-14-021-1218**	**N/A**	**Aqueous**	**ICP 7300**	**06/03/14**	**06/04/14 15:28**	**140604LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0282-1	**Sample**	**Aqueous**	**ICP 7300**	**06/05/14**	**06/05/14 17:53**	**140605SA1**
14-06-0282-1	**Matrix Spike**	**Aqueous**	**ICP 7300**	**06/05/14**	**06/05/14 17:55**	**140605SA1**
14-06-0282-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP 7300**	**06/05/14**	**06/05/14 17:56**	**140605SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	ND	5.000	5.410	108	5.467	109	75-125	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1067	**Sample**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 15:49**	**140604SA1**
#1067	**Matrix Spike**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 15:50**	**140604SA1**
#1067	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 15:52**	**140604SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	0.9435	5.000	6.490	111	5.605	93	84-120	15	0-7	4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7287	**LCS**	**Aqueous**	**ICP 7300**	**06/03/14**	**06/05/14 17:51**	**140605LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Lead	5.000	5.622	112	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-021-1218	**LCS**	**Aqueous**	**ICP 7300**	**06/03/14**	**06/04/14 15:30**	**140604LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Lead	5.000	5.330	107	80-120	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-2144

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 1311	469	ICP 7300	1
EPA 6010B	T22.11.5. AII	469	ICP 7300	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-2144

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, June 03, 2014 11:15 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Steve,
Please run STLC Pb on the following samples: #1067, #1068, #1069, and #1072
Please run TCLP Pb on the following samples: #1067, #1070, #1071, and #1073

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Monday, June 02, 2014 5:26 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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NB 31345

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 5-29-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-05-2144

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	HOLD	EPA 8015	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-29-14	0842	876-IIIB-0-SS-002		X			4 oz glass jar	S			X		1	
2		1104	#1066	X		X	X		O			X		1	
3		1106	#1067	X		X	X		S			X		1	
4		1112	#1068	X		X	X		S			X		1	
5		1115	#1069	X		X	X		S			X		1	
6		1118	#1070	X		X	X		S			X		1	
7		1122	#1071	X		X	X		S			X		1	
8		1125	#1072	X			X		O			X		1	
9		1126	#1073	X		X	X		S			X		1	
(10)		~~1258~~	~~885-IV~~												
		1302													

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	5/29/14	1400	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/29/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/29/14	1530	SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1530
SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1800	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	5/29/14	1800

TOTAL NUMBER OF CONTAINERS: (9)

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-2144

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/29/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.3 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

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Supplemental Report 2

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 14-05-2144

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/12/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-05-2144

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Work Order Narrative

Work Order: 14-05-2144 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/29/14. They were assigned to Work Order 14-05-2144.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-2144
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	05/29/14 18:00
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1069	14-05-2144-5	05/29/14 11:15	1	Solid

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1069	**14-05-2144-5-A**	**05/29/14 11:15**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 15:44**	**140610LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	0.804	0.100	1.00	

Method Blank	**099-14-021-1221**	**N/A**	**Aqueous**	**ICP 7300**	**06/09/14**	**06/10/14 15:27**	**140610LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0594-1	**Sample**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 15:30**	**140610SA1**
14-06-0594-1	**Matrix Spike**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 15:32**	**140610SA1**
14-06-0594-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/09/14**	**06/10/14 15:33**	**140610SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Lead	ND	5.000	5.274	105	4.750	95	84-120	10	0-7	4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-021-1221	**LCS**	**Aqueous**	**ICP 7300**	**06/09/14**	**06/10/14 15:28**	**140610LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Lead	5.000	5.382	108	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-05-2144

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 1311	469	ICP 7300	1

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Glossary of Terms and Qualifiers

Work Order: 14-05-2144

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
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JA	Analyte positively identified but quantitation is an estimate.
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SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
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	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Monday, June 09, 2014 9:38 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Please add lead TCLP to sample #1069 on rush TAT.

Thanks.

Kim

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Friday, June 06, 2014 2:21 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, June 03, 2014 11:15 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Steve,
Please run STLC Pb on the following samples: #1067, #1068, #1069, and #1072
Please run TCLP Pb on the following samples: #1067, #1070, #1071, and #1073

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Monday, June 02, 2014 5:26 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

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7440 Lincoln Way
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NB 31345

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 5-29-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: 14-05-2144

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	HOLD	EPA 8015	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-29-14	0842	876-IIIB-0-SS-002		X			4 oz glass jar	S			X		1	
2		1104	#1066	X		X	X		O			X		1	
3		1106	#1067	X		X	X		S			X		1	
4		1112	#1068	X		X	X		S			X		1	
5		1115	#1069	X		X	X		S			X		1	
6		1118	#1070	X		X	X		S			X		1	
7		1122	#1071	X		X	X		S			X		1	
8		1125	#1072	X			X		O			X		1	
9		1126	#1073	X		X	X		S			X		1	
(10)		~~1258~~	~~885-IV~~												
		1302													

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	5/29/14	1400	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/29/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/29/14	1530	SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1530
SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1800	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	5/29/14	1800

TOTAL NUMBER OF CONTAINERS: (9)

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-2144

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/29/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.3 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

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Supplemental Report 3

Additional requested analyses have been added to the original report.

WORK ORDER NUMBER: 14-05-2144

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/24/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate / 0106270030
Work Order Number: 14-05-2144

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4 Quality Control Sample Data. 6
4.1 MS/MSD. 6
4.2 LCS/LCSD. 7

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Work Order Narrative

Work Order: 14-05-2144 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/29/14. They were assigned to Work Order 14-05-2144.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-2144
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	05/29/14 18:00
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
876-IIIB-O-SS-002	14-05-2144-1	05/29/14 08:42	1	Solid
#1070	14-05-2144-6	05/29/14 11:18	1	Solid

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 7470A
		Units:	mg/L
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1070	**14-05-2144-6-A**	**05/29/14 11:18**	**Solid**	**Mercury 04**	**06/03/14**	**06/23/14 19:08**	**140623L02A**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.00500	1.00	

Method Blank	**099-04-005-779**	**N/A**	**Aqueous**	**Mercury 04**	**06/03/14**	**06/23/14 18:17**	**140623L02A**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.00500	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 7470A
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-1450-1	**Sample**	**Solid**	**Mercury 04**	**06/19/14**	**06/23/14 18:21**	**140323S02**
14-06-1450-1	**Matrix Spike**	**Solid**	**Mercury 04**	**06/19/14**	**06/23/14 18:28**	**140323S02**
14-06-1450-1	**Matrix Spike Duplicate**	**Solid**	**Mercury 04**	**06/19/14**	**06/23/14 18:30**	**140323S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.05000	0.04621	92	0.04458	89	71-134	4	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2144
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 7470A
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-04-005-779	**LCS**	**Aqueous**	**Mercury 04**	**06/03/14**	**06/23/14 18:19**	**140623L02A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.05000	0.05298	106	90-122	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-05-2144

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 7470A	EPA 1311	776	Mercury 04	1

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Glossary of Terms and Qualifiers

Work Order: 14-05-2144

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Friday, June 20, 2014 9:37 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Hi, Steve:
Please add TCLP for barium, chromium, and mercury for sample #1070.
Please add TCLP for chromium for sample #1071.

Quickest turnaround possible please. Thanks,

Kim

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Monday, June 02, 2014 5:27 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Monday, June 09, 2014 9:38 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Please add lead TCLP to sample #1069 on rush TAT.

Thanks.

Kim

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Friday, June 06, 2014 2:21 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
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Website: www.calscience.com

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, June 03, 2014 11:15 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Steve,
Please run STLC Pb on the following samples: #1067, #1068, #1069, and #1072
Please run TCLP Pb on the following samples: #1067, #1070, #1071, and #1073

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Monday, June 02, 2014 5:26 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate / 0106270030 / CEL 14-05-2144

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Calscience
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
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Website: www.calscience.com

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CHAIN-OF-CUSTODY RECORD

NB 31345

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 5-29-14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-05-2144
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	HOLD	EPA 8015	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-29-14	0842	876-IIIB-0-SS-002		X			4 oz glass jar	S			X		1	
2		1104	#1066	X		X	X		O			X		1	
3		1106	#1067	X		X	X		S			X		1	
4		1112	#1068	X		X	X		S			X		1	
5		1115	#1069	X		X	X		S			X		1	
6		1118	#1070	X		X	X		S			X		1	
7		1122	#1071	X		X	X		S			X		1	
8		1125	#1072	X			X		O			X		1	
9		1126	#1073	X		X	X		S			X		1	
(10)		~~1258~~	~~885-IV~~												
		1302													

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	5/29/14	1400	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/29/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	5/29/14	1530	SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1530
SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1800	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	5/29/14	1800

TOTAL NUMBER OF CONTAINERS: (9)

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-2144

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/29/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.3 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 659

Preservative: h: HCL n: HNO_3 na_2: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-05-2145

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/05/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-05-2145

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-05-2145 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/29/14. They were assigned to Work Order 14-05-2145.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-05-2145
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	05/29/14 18:00
		Number of Containers:	12
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
885-IV-R/R-SS-008	14-05-2145-1	05/29/14 12:58	1	Solid
885-IV-R/R-SS-009	14-05-2145-2	05/29/14 13:02	1	Solid
885-IV-R/R-SS-010	14-05-2145-3	05/29/14 13:07	1	Solid
885-IV-R/R-SS-011	14-05-2145-4	05/29/14 13:10	1	Solid
885-IV-R/R-SS-012	14-05-2145-5	05/29/14 13:16	1	Solid
885-IV-R/R-SS-013	14-05-2145-6	05/29/14 13:20	1	Solid
885-IV-R/R-SS-014	14-05-2145-7	05/29/14 13:27	1	Solid
885-IV-R/R-SS-015	14-05-2145-8	05/29/14 13:29	1	Solid
885-IV-R/R-SS-016	14-05-2145-9	05/29/14 13:38	1	Solid
885-IV-R/R-SS-017	14-05-2145-10	05/29/14 13:40	1	Solid
885-IV-R/R-SS-018	14-05-2145-11	05/29/14 13:48	1	Solid
885-IV-R/R-SS-019	14-05-2145-12	05/29/14 13:51	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-05-2145
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	05/29/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-008 (14-05-2145-1)						
Arsenic	4.74		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	178		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.484		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	22.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	15.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	26.0		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	1.86		0.498	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.440		0.249	mg/kg	EPA 6010B	EPA 3050B
Nickel	17.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	42.9		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	61.0		0.995	mg/kg	EPA 6010B	EPA 3050B
885-IV-R/R-SS-009 (14-05-2145-2)						
Arsenic	2.31		0.746	mg/kg	EPA 6010B	EPA 3050B
Barium	128		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.420		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.8		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.8		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	17.7		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	1.80		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.1		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	36.0		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	49.6		0.995	mg/kg	EPA 6010B	EPA 3050B
885-IV-R/R-SS-010 (14-05-2145-3)						
Arsenic	1.37		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	128		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.348		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	14.9		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.90		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	50.8		1.00	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-05-2145 Former Pechiney Cast Plate / 0106270030 05/29/14
Attn:	Linda Conlan		Page 2 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-011 (14-05-2145-4)						
Arsenic	1.78		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	142		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.469		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.4		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.9		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	19.2		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	2.65		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.4		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.9		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	47.2		0.985	mg/kg	EPA 6010B	EPA 3050B
885-IV-R/R-SS-012 (14-05-2145-5)						
Arsenic	1.01		0.732	mg/kg	EPA 6010B	EPA 3050B
Barium	104		0.488	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.311		0.244	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.8		0.244	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.94		0.244	mg/kg	EPA 6010B	EPA 3050B
Copper	13.1		0.488	mg/kg	EPA 6010B	EPA 3050B
Lead	1.33		0.488	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.59		0.244	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.3		0.244	mg/kg	EPA 6010B	EPA 3050B
Zinc	42.3		0.976	mg/kg	EPA 6010B	EPA 3050B
885-IV-R/R-SS-013 (14-05-2145-6)						
Arsenic	1.20		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	115		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.360		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	15.0		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	2.97		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	51.0		1.00	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-05-2145 Former Pechiney Cast Plate / 0106270030 05/29/14
Attn:	Linda Conlan		Page 3 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-014 (14-05-2145-7)						
Arsenic	2.13		0.718	mg/kg	EPA 6010B	EPA 3050B
Barium	115		0.478	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.321		0.239	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.7		0.239	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.84		0.239	mg/kg	EPA 6010B	EPA 3050B
Copper	15.0		0.478	mg/kg	EPA 6010B	EPA 3050B
Lead	7.95		0.478	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.6		0.239	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.7		0.239	mg/kg	EPA 6010B	EPA 3050B
Zinc	101		0.957	mg/kg	EPA 6010B	EPA 3050B
C9-C10	6.2		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	5.5		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	7.2		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	7.6		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	44		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
885-IV-R/R-SS-015 (14-05-2145-8)						
Arsenic	2.12		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	116		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.354		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.2		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.83		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	14.5		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	1.32		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.8		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.6		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	45.1		0.980	mg/kg	EPA 6010B	EPA 3050B
885-IV-R/R-SS-016 (14-05-2145-9)						
Arsenic	1.05		0.773	mg/kg	EPA 6010B	EPA 3050B
Barium	120		0.515	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.344		0.258	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.6		0.258	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.6		0.258	mg/kg	EPA 6010B	EPA 3050B
Copper	14.3		0.515	mg/kg	EPA 6010B	EPA 3050B
Lead	1.28		0.515	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.4		0.258	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.2		0.258	mg/kg	EPA 6010B	EPA 3050B
Zinc	46.3		1.03	mg/kg	EPA 6010B	EPA 3050B

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-05-2145 Former Pechiney Cast Plate / 0106270030 05/29/14
Attn:	Linda Conlan		Page 4 of 4

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
885-IV-R/R-SS-017 (14-05-2145-10)						
Arsenic	1.22		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	131		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.348		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	15.5		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.29		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	46.6		1.00	mg/kg	EPA 6010B	EPA 3050B
885-IV-R/R-SS-018 (14-05-2145-11)						
Arsenic	7.68		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	158		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.425		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	19.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	13.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	19.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	2.92		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	15.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	60.5		1.00	mg/kg	EPA 6010B	EPA 3050B
885-IV-R/R-SS-019 (14-05-2145-12)						
Arsenic	8.55		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	179		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.464		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	21.6		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	14.5		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	24.5		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	2.17		0.493	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.286		0.246	mg/kg	EPA 6010B	EPA 3050B
Nickel	16.5		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	42.2		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	78.0		0.985	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-012	**14-05-2145-5-A**	**05/29/14 13:16**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 13:58**	**140530B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-013	**14-05-2145-6-A**	**05/29/14 13:20**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 14:16**	**140530B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	84	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-014	**14-05-2145-7-A**	**05/29/14 13:27**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 14:34**	**140530B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	6.2	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	5.5	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	7.2	4.9	1.00	
C29-C32	7.6	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	44	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-015	**14-05-2145-8-A**	**05/29/14 13:29**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 14:52**	**140530B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-016	**14-05-2145-9-A**	**05/29/14 13:38**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 15:09**	**140530B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-017	**14-05-2145-10-A**	**05/29/14 13:40**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 15:27**	**140530B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	84	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-932**	**N/A**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 12:32**	**140530B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-008	**14-05-2145-1-A**	**05/29/14 12:58**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:38**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	4.74	0.746	0.995	
Barium	178	0.498	0.995	
Beryllium	0.484	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	22.1	0.249	0.995	
Cobalt	15.1	0.249	0.995	
Copper	26.0	0.498	0.995	
Lead	1.86	0.498	0.995	
Molybdenum	0.440	0.249	0.995	
Nickel	17.1	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	42.9	0.249	0.995	
Zinc	61.0	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-009	**14-05-2145-2-A**	**05/29/14 13:02**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:39**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	2.31	0.746	0.995	
Barium	128	0.498	0.995	
Beryllium	0.420	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	15.8	0.249	0.995	
Cobalt	10.8	0.249	0.995	
Copper	17.7	0.498	0.995	
Lead	1.80	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	12.1	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	36.0	0.249	0.995	
Zinc	49.6	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-010	**14-05-2145-3-A**	**05/29/14 13:07**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:40**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.37	0.750	1.00	
Barium	128	0.500	1.00	
Beryllium	0.348	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	15.2	0.250	1.00	
Cobalt	10.6	0.250	1.00	
Copper	14.9	0.500	1.00	
Lead	1.90	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	11.2	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	33.2	0.250	1.00	
Zinc	50.8	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-011	**14-05-2145-4-A**	**05/29/14 13:10**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:41**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	1.78	0.739	0.985	
Barium	142	0.493	0.985	
Beryllium	0.469	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	16.4	0.246	0.985	
Cobalt	10.9	0.246	0.985	
Copper	19.2	0.493	0.985	
Lead	2.65	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	12.4	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	35.9	0.246	0.985	
Zinc	47.2	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-012	**14-05-2145-5-A**	**05/29/14 13:16**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:42**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.732	0.976	
Arsenic	1.01	0.732	0.976	
Barium	104	0.488	0.976	
Beryllium	0.311	0.244	0.976	
Cadmium	ND	0.488	0.976	
Chromium	12.8	0.244	0.976	
Cobalt	8.94	0.244	0.976	
Copper	13.1	0.488	0.976	
Lead	1.33	0.488	0.976	
Molybdenum	ND	0.244	0.976	
Nickel	9.59	0.244	0.976	
Selenium	ND	0.732	0.976	
Silver	ND	0.244	0.976	
Thallium	ND	0.732	0.976	
Vanadium	29.3	0.244	0.976	
Zinc	42.3	0.976	0.976	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-013	**14-05-2145-6-A**	**05/29/14 13:20**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:43**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.20	0.750	1.00	
Barium	115	0.500	1.00	
Beryllium	0.360	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	15.3	0.250	1.00	
Cobalt	10.1	0.250	1.00	
Copper	15.0	0.500	1.00	
Lead	2.97	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	11.0	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	35.7	0.250	1.00	
Zinc	51.0	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-014	**14-05-2145-7-A**	**05/29/14 13:27**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:49**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.718	0.957	
Arsenic	2.13	0.718	0.957	
Barium	115	0.478	0.957	
Beryllium	0.321	0.239	0.957	
Cadmium	ND	0.478	0.957	
Chromium	13.7	0.239	0.957	
Cobalt	9.84	0.239	0.957	
Copper	15.0	0.478	0.957	
Lead	7.95	0.478	0.957	
Molybdenum	ND	0.239	0.957	
Nickel	10.6	0.239	0.957	
Selenium	ND	0.718	0.957	
Silver	ND	0.239	0.957	
Thallium	ND	0.718	0.957	
Vanadium	30.7	0.239	0.957	
Zinc	101	0.957	0.957	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-015	**14-05-2145-8-A**	**05/29/14 13:29**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:50**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	2.12	0.735	0.980	
Barium	116	0.490	0.980	
Beryllium	0.354	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	14.2	0.245	0.980	
Cobalt	9.83	0.245	0.980	
Copper	14.5	0.490	0.980	
Lead	1.32	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	10.8	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	32.6	0.245	0.980	
Zinc	45.1	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-016	**14-05-2145-9-A**	**05/29/14 13:38**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:51**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.773	1.03	
Arsenic	1.05	0.773	1.03	
Barium	120	0.515	1.03	
Beryllium	0.344	0.258	1.03	
Cadmium	ND	0.515	1.03	
Chromium	14.6	0.258	1.03	
Cobalt	10.6	0.258	1.03	
Copper	14.3	0.515	1.03	
Lead	1.28	0.515	1.03	
Molybdenum	ND	0.258	1.03	
Nickel	11.4	0.258	1.03	
Selenium	ND	0.773	1.03	
Silver	ND	0.258	1.03	
Thallium	ND	0.773	1.03	
Vanadium	32.2	0.258	1.03	
Zinc	46.3	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-017	**14-05-2145-10-A**	**05/29/14 13:40**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:52**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.22	0.750	1.00	
Barium	131	0.500	1.00	
Beryllium	0.348	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	15.5	0.250	1.00	
Cobalt	10.8	0.250	1.00	
Copper	15.5	0.500	1.00	
Lead	1.29	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	11.8	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	33.2	0.250	1.00	
Zinc	46.6	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 11 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-018	**14-05-2145-11-A**	**05/29/14 13:48**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:53**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	7.68	0.750	1.00	
Barium	158	0.500	1.00	
Beryllium	0.425	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	19.5	0.250	1.00	
Cobalt	13.3	0.250	1.00	
Copper	19.8	0.500	1.00	
Lead	2.92	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	15.0	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	39.9	0.250	1.00	
Zinc	60.5	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 12 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-019	**14-05-2145-12-A**	**05/29/14 13:51**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:54**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	8.55	0.739	0.985	
Barium	179	0.493	0.985	
Beryllium	0.464	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	21.6	0.246	0.985	
Cobalt	14.5	0.246	0.985	
Copper	24.5	0.493	0.985	
Lead	2.17	0.493	0.985	
Molybdenum	0.286	0.246	0.985	
Nickel	16.5	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	42.2	0.246	0.985	
Zinc	78.0	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 13 of 13

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18425**	**N/A**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:33**	**140529L02**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-008	**14-05-2145-1-A**	**05/29/14 12:58**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:42**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-009	**14-05-2145-2-A**	**05/29/14 13:02**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:44**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-010	**14-05-2145-3-A**	**05/29/14 13:07**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:46**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-011	**14-05-2145-4-A**	**05/29/14 13:10**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:48**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-012	**14-05-2145-5-A**	**05/29/14 13:16**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:51**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-013	**14-05-2145-6-A**	**05/29/14 13:20**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:57**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-014	**14-05-2145-7-A**	**05/29/14 13:27**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:59**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-015	**14-05-2145-8-A**	**05/29/14 13:29**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 16:02**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-016	**14-05-2145-9-A**	**05/29/14 13:38**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 16:04**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

885-IV-R/R-SS-017	**14-05-2145-10-A**	**05/29/14 13:40**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:35**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

885-IV-R/R-SS-018	**14-05-2145-11-A**	**05/29/14 13:48**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 16:06**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

885-IV-R/R-SS-019	**14-05-2145-12-A**	**05/29/14 13:51**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 16:08**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

Method Blank	**099-16-272-269**	**N/A**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:31**	**140530L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-008	**14-05-2145-1-A**	**05/29/14 12:58**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 13:32**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

885-IV-R/R-SS-009	**14-05-2145-2-A**	**05/29/14 13:02**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 13:49**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-012	**14-05-2145-5-A**	**05/29/14 13:16**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 14:08**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

885-IV-R/R-SS-013	**14-05-2145-6-A**	**05/29/14 13:20**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 14:25**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
885-IV-R/R-SS-016	**14-05-2145-9-A**	**05/29/14 13:38**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 14:43**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

885-IV-R/R-SS-017	**14-05-2145-10-A**	**05/29/14 13:40**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 15:01**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-258**	**N/A**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 09:57**	**140529L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
885-IV-R/R-SS-012	**Sample**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 13:58**	**140530S01**
885-IV-R/R-SS-012	**Matrix Spike**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 13:06**	**140530S01**
885-IV-R/R-SS-012	**Matrix Spike Duplicate**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 13:23**	**140530S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	412.1	103	409.0	102	64-130	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
885-IV-R/R-SS-017	**Sample**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:52**	**140529S02**
885-IV-R/R-SS-017	**Matrix Spike**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:36**	**140529S02**
885-IV-R/R-SS-017	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:37**	**140529S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	15.47	62	12.33	49	50-115	23	0-20	3,4
Arsenic	1.219	25.00	27.13	104	28.68	110	75-125	6	0-20	
Barium	131.1	25.00	161.1	4X	173.3	4X	75-125	4X	0-20	Q
Beryllium	0.3484	25.00	26.72	105	27.25	108	75-125	2	0-20	
Cadmium	ND	25.00	25.33	101	25.77	103	75-125	2	0-20	
Chromium	15.46	25.00	42.54	108	44.62	117	75-125	5	0-20	
Cobalt	10.83	25.00	37.20	105	39.20	113	75-125	5	0-20	
Copper	15.54	25.00	42.86	109	45.73	121	75-125	6	0-20	
Lead	1.288	25.00	25.84	98	26.73	102	75-125	3	0-20	
Molybdenum	ND	25.00	25.48	102	25.85	103	75-125	1	0-20	
Nickel	11.78	25.00	37.73	104	39.89	112	75-125	6	0-20	
Selenium	ND	25.00	21.76	87	22.64	91	75-125	4	0-20	
Silver	ND	12.50	13.14	105	13.29	106	75-125	1	0-20	
Thallium	ND	25.00	19.65	79	20.00	80	75-125	2	0-20	
Vanadium	33.18	25.00	63.20	120	65.64	130	75-125	4	0-20	3
Zinc	46.60	25.00	72.94	105	76.97	122	75-125	5	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
885-IV-R/R-SS-017	**Sample**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:35**	**140530S01**
885-IV-R/R-SS-017	**Matrix Spike**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:37**	**140530S01**
885-IV-R/R-SS-017	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:40**	**140530S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.9167	110	0.7767	93	71-137	17	0-14	4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-2144-7	**Sample**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 12:37**	**140529S13**
14-05-2144-7	**Matrix Spike**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 15:19**	**140529S13**
14-05-2144-7	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 15:37**	**140529S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	78.62	79	85.64	86	50-135	9	0-25	
Aroclor-1260	ND	100.0	100.3	100	85.54	86	50-135	16	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-932	**LCS**	**Solid**	**GC 47**	**05/30/14**	**05/30/14 12:49**	**140530B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	348.4	87	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18425	**LCS**	**Solid**	**ICP 7300**	**05/29/14**	**05/30/14 16:34**	**140529L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	26.81	107	80-120	73-127	
Arsenic	25.00	25.81	103	80-120	73-127	
Barium	25.00	26.81	107	80-120	73-127	
Beryllium	25.00	25.57	102	80-120	73-127	
Cadmium	25.00	26.52	106	80-120	73-127	
Chromium	25.00	26.86	107	80-120	73-127	
Cobalt	25.00	28.75	115	80-120	73-127	
Copper	25.00	25.84	103	80-120	73-127	
Lead	25.00	26.56	106	80-120	73-127	
Molybdenum	25.00	26.70	107	80-120	73-127	
Nickel	25.00	28.18	113	80-120	73-127	
Selenium	25.00	23.08	92	80-120	73-127	
Silver	12.50	13.10	105	80-120	73-127	
Thallium	25.00	27.95	112	80-120	73-127	
Vanadium	25.00	25.81	103	80-120	73-127	
Zinc	25.00	26.32	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-269	**LCS**	**Solid**	**Mercury 05**	**05/30/14**	**05/30/14 15:33**	**140530L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8533	102	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	05/29/14
121 Innovation Drive, Suite 200		Work Order:	14-05-2145
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-258	**LCS**	**Solid**	**GC 58**	**05/29/14**	**05/31/14 10:15**	**140529L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	98.11	98	50-135	
Aroclor-1260	100.0	96.14	96	60-130	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-05-2145

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8082	EPA 3540C	842	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-05-2145

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31346

PROJECT NAME: Former Peehiney Cast Plate Facility			DATE: 5-29-14 PAGE 1 OF 1
PROJECT NUMBER: 01062700030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-05-2145
TURNAROUND TIME: Standard - 5 day			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	Title 22 Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	5-29-14	1258	885-IV-R/R-SS-008	X		X	4 oz glass jar	S			X		1	
2		1302	885-IV-R/R-SS-009	X		X		S			X		1	
3		1307	885-IV-R/R-SS-010			X		S			X		1	
4		1310	885-IV-R/R-SS-011			X		S			X		1	
5		1316	885-IV-R/R-SS-012	X	X	X		S			X		1	
6		1320	885-IV-R/R-SS-013	X	X	X		S			X		1	
7		1327	885-IV-R/R-SS-014		X	X		S			X		1	
8		1329	885-IV-R/R-SS-015		X	X		S			X		1	
9		1338	885-IV-R/R-SS-016	X	X	X		S			X		1	
10		1340	885-IV-R/R-SS-017	X	X	X		S			X		1	
11		1348	885-IV-R/R-SS-018			X		S			X		1	
12		1351	885-IV-R/R-SS-019			X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	5/29/14	1400	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	5/29/14	1400
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	5/29/14	1530	SIGNATURE: PRINTED NAME: RUDY M MIGA COMPANY: CEL	5/29/14	1530
SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: CEL	5/29/14	1800	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	5/29/14	1800

TOTAL NUMBER OF CONTAINERS: 12

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-2145

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 05/29/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.3 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 778

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 778

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-06-0101

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/05/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-06-0101

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-06-0101 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 06/02/14. They were assigned to Work Order 14-06-0101.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0101
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/02/14 18:30
		Number of Containers:	6
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
293-IIIA-P/S-SS-010	14-06-0101-1	06/02/14 15:36	1	Solid
293-IIIA-P/S-SS-011	14-06-0101-2	06/02/14 15:47	1	Solid
293-IIIA-P/S-SS-012	14-06-0101-3	06/02/14 15:48	1	Solid
293-IIIA-P/S-SS-013	14-06-0101-4	06/02/14 15:50	1	Solid
293-IIIA-P/S-SS-014	14-06-0101-5	06/02/14 15:51	1	Solid
293-IIIA-P/S-SS-015	14-06-0101-6	06/02/14 15:52	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0101
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/02/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
293-IIIA-P/S-SS-010 (14-06-0101-1)						
Aroclor-1248	89		50	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-012 (14-06-0101-3)						
Aroclor-1248	29000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2300		500	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-013 (14-06-0101-4)						
Aroclor-1248	91		51	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-015 (14-06-0101-6)						
Aroclor-1248	1100		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	100		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/02/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0101
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-010	**14-06-0101-1-A**	**06/02/14 15:36**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 10:56**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	89	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	133	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	141	50-130	2,7

293-IIIA-P/S-SS-011	**14-06-0101-2-A**	**06/02/14 15:47**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 11:32**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/02/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0101
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-012	**14-06-0101-3-A**	**06/02/14 15:48**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 16:56**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	2300	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

293-IIIA-P/S-SS-012	**14-06-0101-3-A**	**06/02/14 15:48**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 17:14**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	29000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	127	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/02/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0101
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-013	**14-06-0101-4-A**	**06/02/14 15:50**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 12:08**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	91	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	113	50-130	

293-IIIA-P/S-SS-014	**14-06-0101-5-A**	**06/02/14 15:51**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 12:26**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/02/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0101
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-015	**14-06-0101-6-A**	**06/02/14 15:52**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 12:44**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	100	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

293-IIIA-P/S-SS-015	**14-06-0101-6-A**	**06/02/14 15:52**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 17:32**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1100	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/02/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0101
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-259**	**N/A**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 11:14**	**140602L16**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/02/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0101
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
293-IIIA-P/S-SS-015	**Sample**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 12:44**	**140602S16**
293-IIIA-P/S-SS-015	**Matrix Spike**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 13:02**	**140602S16**
293-IIIA-P/S-SS-015	**Matrix Spike Duplicate**	**Solid**	**GC 58**	**06/02/14**	**06/05/14 13:20**	**140602S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	369.6	370	371.9	372	50-135	1	0-25	3
Aroclor-1260	102.9	100.0	187.5	85	158.2	55	50-135	17	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/02/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0101
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-259	**LCS**	**Solid**	**GC 58**	**06/02/14**	**06/04/14 22:20**	**140602L16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	80.42	80	50-135	
Aroclor-1260	100.0	75.86	76	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-06-0101

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	842	GC 58	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-06-0101

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31349

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 6-2-14 PAGE 1 OF 1
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-06-0101
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chomunsky

ANALYSES: EPA 8082

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-2-14	1536	293-IIIA-P/S-SS-010	X	4 oz glass jar	S			X		1	
2		1547	293-IIIA-P/S-SS-011	X		S			X		1	
3		1548	293-IIIA-P/S-SS-012	X		S			X		1	
4		1550	293-IIIA-P/S-SS-013	X		S			X		1	
5		1551	293-IIIA-P/S-SS-014	X		S			X		1	
6		1552	293-IIIA-P/S-SS-015	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Stephen Hung COMPANY: AMEC	6/2/14	1605	SIGNATURE: [signature] PRINTED NAME: D. Nowan COMPANY: ECI	06/02/14	16.05
SIGNATURE: [signature] PRINTED NAME: D. Nowan COMPANY: ECI	6/02/14	18.30	SIGNATURE: [signature] PRINTED NAME: N. Cruse COMPANY: ECI	6/2/14	1830
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 6

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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eurofins | Calscience

WORK ORDER #: 14-06-0101

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/02/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.0 °C - 0.3 °C (CF) = 2.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 816

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 816

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-06-0199

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/06/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 14-06-0199

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-06-0199 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 06/03/14. They were assigned to Work Order 14-06-0199.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0199
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	06/03/14 18:00
		Number of Containers:	13
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
886-V-O-CS-001	14-06-0199-1	06/03/14 07:25	1	Concrete
886-V-O-CS-002	14-06-0199-2	06/03/14 07:30	1	Concrete
293-IIIA-P/S-CS-034	14-06-0199-3	06/03/14 07:45	1	Concrete
293-IIIA-P/S-CS-035	14-06-0199-4	06/03/14 07:52	1	Concrete
#1090	14-06-0199-5	06/03/14 09:32	1	Solid
#1091	14-06-0199-6	06/03/14 09:34	1	Solid
#1092	14-06-0199-7	06/03/14 09:36	1	Solid
#1093	14-06-0199-8	06/03/14 09:33	1	Solid
#1094	14-06-0199-9	06/03/14 09:34	1	Solid
#1095	14-06-0199-10	06/03/14 09:35	1	Solid
#1096	14-06-0199-11	06/03/14 09:37	1	Solid
#1097	14-06-0199-12	06/03/14 09:40	1	Solid
#1098	14-06-0199-13	06/03/14 09:39	1	Solid

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-06-0199
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	06/03/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
886-V-O-CS-001 (14-06-0199-1)						
Aroclor-1248	140		50	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-CS-035 (14-06-0199-4)						
Aroclor-1248	140		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	97		50	ug/kg	EPA 8082	EPA 3540C
#1090 (14-06-0199-5)						
Arsenic	2.47		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	119		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.352		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	47.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	12.5		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	71.2		1.00	mg/kg	EPA 6010B	EPA 3050B
C19-C20	5.5		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	13		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	16		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	25		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	36		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	26		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	130		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	110		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	240		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	180		50	ug/kg	EPA 8082	EPA 3540C
#1091 (14-06-0199-6)						
Arsenic	1.37		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	103		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.290		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.6		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.32		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	12.0		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	0.910		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.34		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.1		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	43.5		0.990	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-06-0199 Former Pechiney Cast Plate / 0106270030 06/03/14
Attn:	Linda Conlan		Page 2 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1092 (14-06-0199-7)						
Arsenic	1.13		0.728	mg/kg	EPA 6010B	EPA 3050B
Barium	108		0.485	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.288		0.243	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.3		0.243	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.87		0.243	mg/kg	EPA 6010B	EPA 3050B
Copper	12.9		0.485	mg/kg	EPA 6010B	EPA 3050B
Lead	0.671		0.485	mg/kg	EPA 6010B	EPA 3050B
Nickel	9.58		0.243	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.6		0.243	mg/kg	EPA 6010B	EPA 3050B
Zinc	46.0		0.971	mg/kg	EPA 6010B	EPA 3050B
#1093 (14-06-0199-8)						
Arsenic	1.79		0.718	mg/kg	EPA 6010B	EPA 3050B
Barium	114		0.478	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.343		0.239	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.7		0.239	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.3		0.239	mg/kg	EPA 6010B	EPA 3050B
Copper	14.2		0.478	mg/kg	EPA 6010B	EPA 3050B
Lead	1.18		0.478	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.9		0.239	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.2		0.239	mg/kg	EPA 6010B	EPA 3050B
Zinc	48.4		0.957	mg/kg	EPA 6010B	EPA 3050B
C25-C28	6.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	7.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1094 (14-06-0199-9)						
Arsenic	1.69		0.721	mg/kg	EPA 6010B	EPA 3050B
Barium	105		0.481	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.319		0.240	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.3		0.240	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.1		0.240	mg/kg	EPA 6010B	EPA 3050B
Copper	16.5		0.481	mg/kg	EPA 6010B	EPA 3050B
Lead	0.929		0.481	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.4		0.240	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.9		0.240	mg/kg	EPA 6010B	EPA 3050B
Zinc	45.9		0.962	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0862		0.0833	mg/kg	EPA 7471A	EPA 7471A Total

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-06-0199
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	06/03/14
Attn:	Linda Conlan		Page 3 of 4

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1095 (14-06-0199-10)						
Arsenic	0.928		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	89.9		0.495	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.6		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.12		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	9.84		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.88		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	28.3		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	37.7		0.990	mg/kg	EPA 6010B	EPA 3050B
#1096 (14-06-0199-11)						
Arsenic	1.32		0.754	mg/kg	EPA 6010B	EPA 3050B
Barium	111		0.503	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.340		0.251	mg/kg	EPA 6010B	EPA 3050B
Chromium	14.7		0.251	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.4		0.251	mg/kg	EPA 6010B	EPA 3050B
Copper	15.4		0.503	mg/kg	EPA 6010B	EPA 3050B
Lead	1.24		0.503	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.1		0.251	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.0		0.251	mg/kg	EPA 6010B	EPA 3050B
Zinc	47.5		1.01	mg/kg	EPA 6010B	EPA 3050B

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-06-0199
	121 Innovation Drive, Suite 200	Project Name:	Former Pechiney Cast Plate / 0106270030
	Irvine, CA 92617-3094	Received:	06/03/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1097 (14-06-0199-12)						
Arsenic	2.84		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	112		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.278		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.9		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.53		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	23.2		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	19.5		0.490	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.261		0.245	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.1		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	21.9		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	52.2		0.980	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0938		0.0833	mg/kg	EPA 7471A	EPA 7471A Total
C23-C24	26		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	30		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	57		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	45		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	38		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	260		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	3800		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	560		50	ug/kg	EPA 8082	EPA 3540C
#1098 (14-06-0199-13)						
Aroclor-1248	520		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	450		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	180		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1090	**14-06-0199-5-A**	**06/03/14 09:32**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 03:48**	**140603B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	5.5	5.1	1.00	
C21-C22	13	5.1	1.00	
C23-C24	16	5.1	1.00	
C25-C28	25	5.1	1.00	
C29-C32	36	5.1	1.00	
C33-C36	26	5.1	1.00	
C37-C40	ND	5.1	1.00	
C41-C44	ND	5.1	1.00	
C6-C44 Total	130	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1091	**14-06-0199-6-A**	**06/03/14 09:34**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 04:03**	**140603B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1092	**14-06-0199-7-A**	**06/03/14 09:36**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 04:19**	**140603B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	91	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1093	**14-06-0199-8-A**	**06/03/14 09:33**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 04:35**	**140603B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	6.3	5.0	1.00	
C29-C32	7.5	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	24	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1094	**14-06-0199-9-A**	**06/03/14 09:34**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 04:51**	**140603B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	91	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1095	**14-06-0199-10-A**	**06/03/14 09:35**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 05:07**	**140603B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	88	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1096	**14-06-0199-11-A**	**06/03/14 09:37**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 05:23**	**140603B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1097	**14-06-0199-12-A**	**06/03/14 09:40**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 05:39**	**140603B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	ND	25	5.00	
C11-C12	ND	25	5.00	
C13-C14	ND	25	5.00	
C15-C16	ND	25	5.00	
C17-C18	ND	25	5.00	
C19-C20	ND	25	5.00	
C21-C22	ND	25	5.00	
C23-C24	26	25	5.00	
C25-C28	30	25	5.00	
C29-C32	57	25	5.00	
C33-C36	45	25	5.00	
C37-C40	38	25	5.00	
C41-C44	ND	25	5.00	
C6-C44 Total	260	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-937**	**N/A**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 02:45**	**140603B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	87	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1090	**14-06-0199-5-A**	**06/03/14 09:32**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:55**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	2.47	0.750	1.00	
Barium	119	0.500	1.00	
Beryllium	0.352	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	16.1	0.250	1.00	
Cobalt	10.2	0.250	1.00	
Copper	47.8	0.500	1.00	
Lead	12.5	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	12.5	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	33.5	0.250	1.00	
Zinc	71.2	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1091	**14-06-0199-6-A**	**06/03/14 09:34**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:56**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	1.37	0.743	0.990	
Barium	103	0.495	0.990	
Beryllium	0.290	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	12.6	0.248	0.990	
Cobalt	9.32	0.248	0.990	
Copper	12.0	0.495	0.990	
Lead	0.910	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	9.34	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	32.1	0.248	0.990	
Zinc	43.5	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1092	**14-06-0199-7-A**	**06/03/14 09:36**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:57**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.728	0.971	
Arsenic	1.13	0.728	0.971	
Barium	108	0.485	0.971	
Beryllium	0.288	0.243	0.971	
Cadmium	ND	0.485	0.971	
Chromium	13.3	0.243	0.971	
Cobalt	9.87	0.243	0.971	
Copper	12.9	0.485	0.971	
Lead	0.671	0.485	0.971	
Molybdenum	ND	0.243	0.971	
Nickel	9.58	0.243	0.971	
Selenium	ND	0.728	0.971	
Silver	ND	0.243	0.971	
Thallium	ND	0.728	0.971	
Vanadium	32.6	0.243	0.971	
Zinc	46.0	0.971	0.971	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1093	**14-06-0199-8-A**	**06/03/14 09:33**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:58**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.718	0.957	
Arsenic	1.79	0.718	0.957	
Barium	114	0.478	0.957	
Beryllium	0.343	0.239	0.957	
Cadmium	ND	0.478	0.957	
Chromium	14.7	0.239	0.957	
Cobalt	10.3	0.239	0.957	
Copper	14.2	0.478	0.957	
Lead	1.18	0.478	0.957	
Molybdenum	ND	0.239	0.957	
Nickel	10.9	0.239	0.957	
Selenium	ND	0.718	0.957	
Silver	ND	0.239	0.957	
Thallium	ND	0.718	0.957	
Vanadium	35.2	0.239	0.957	
Zinc	48.4	0.957	0.957	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1094	**14-06-0199-9-A**	**06/03/14 09:34**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 13:03**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.721	0.962	
Arsenic	1.69	0.721	0.962	
Barium	105	0.481	0.962	
Beryllium	0.319	0.240	0.962	
Cadmium	ND	0.481	0.962	
Chromium	14.3	0.240	0.962	
Cobalt	10.1	0.240	0.962	
Copper	16.5	0.481	0.962	
Lead	0.929	0.481	0.962	
Molybdenum	ND	0.240	0.962	
Nickel	10.4	0.240	0.962	
Selenium	ND	0.721	0.962	
Silver	ND	0.240	0.962	
Thallium	ND	0.721	0.962	
Vanadium	33.9	0.240	0.962	
Zinc	45.9	0.962	0.962	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1095	**14-06-0199-10-A**	**06/03/14 09:35**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 13:04**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	0.928	0.743	0.990	
Barium	89.9	0.495	0.990	
Beryllium	ND	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	10.6	0.248	0.990	
Cobalt	8.12	0.248	0.990	
Copper	9.84	0.495	0.990	
Lead	ND	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	7.88	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	28.3	0.248	0.990	
Zinc	37.7	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1096	**14-06-0199-11-A**	**06/03/14 09:37**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 13:06**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.754	1.01	
Arsenic	1.32	0.754	1.01	
Barium	111	0.503	1.01	
Beryllium	0.340	0.251	1.01	
Cadmium	ND	0.503	1.01	
Chromium	14.7	0.251	1.01	
Cobalt	10.4	0.251	1.01	
Copper	15.4	0.503	1.01	
Lead	1.24	0.503	1.01	
Molybdenum	ND	0.251	1.01	
Nickel	11.1	0.251	1.01	
Selenium	ND	0.754	1.01	
Silver	ND	0.251	1.01	
Thallium	ND	0.754	1.01	
Vanadium	31.0	0.251	1.01	
Zinc	47.5	1.01	1.01	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1097	**14-06-0199-12-A**	**06/03/14 09:40**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 13:07**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	2.84	0.735	0.980	
Barium	112	0.490	0.980	
Beryllium	0.278	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	12.9	0.245	0.980	
Cobalt	6.53	0.245	0.980	
Copper	23.2	0.490	0.980	
Lead	19.5	0.490	0.980	
Molybdenum	0.261	0.245	0.980	
Nickel	10.1	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	21.9	0.245	0.980	
Zinc	52.2	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18446**	**N/A**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:18**	**140603L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1090	**14-06-0199-5-a**	**06/03/14 09:32**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:24**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#1091	**14-06-0199-6-a**	**06/03/14 09:34**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:31**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

#1092	**14-06-0199-7-a**	**06/03/14 09:36**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:33**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

#1093	**14-06-0199-8-a**	**06/03/14 09:33**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:35**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

#1094	**14-06-0199-9-a**	**06/03/14 09:34**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:38**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0862	0.0833	1.00	

#1095	**14-06-0199-10-a**	**06/03/14 09:35**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:40**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

#1096	**14-06-0199-11-a**	**06/03/14 09:37**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:47**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

#1097	**14-06-0199-12-a**	**06/03/14 09:40**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:49**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0938	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-272-285**	**N/A**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:20**	**140604L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
886-V-O-CS-001	**14-06-0199-1-A**	**06/03/14 07:25**	**Concrete**	**GC 31**	**06/03/14**	**06/05/14 15:45**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	140	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

886-V-O-CS-002	**14-06-0199-2-A**	**06/03/14 07:30**	**Concrete**	**GC 31**	**06/03/14**	**06/05/14 16:04**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	122	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-CS-034	**14-06-0199-3-A**	**06/03/14 07:45**	**Concrete**	**GC 31**	**06/03/14**	**06/05/14 16:24**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

293-IIIA-P/S-CS-035	**14-06-0199-4-A**	**06/03/14 07:52**	**Concrete**	**GC 31**	**06/03/14**	**06/05/14 16:43**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	140	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	97	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	116	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1090	**14-06-0199-5-A**	**06/03/14 09:32**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 17:02**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	110	50	1.00	
Aroclor-1254	240	50	1.00	
Aroclor-1260	180	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	121	50-130	

#1091	**14-06-0199-6-A**	**06/03/14 09:34**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 17:21**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	122	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1092	**14-06-0199-7-A**	**06/03/14 09:36**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 17:40**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	121	50-130	

#1093	**14-06-0199-8-A**	**06/03/14 09:33**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 17:59**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1094	**14-06-0199-9-A**	**06/03/14 09:34**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 18:18**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	132	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	138	50-130	2,7

#1095	**14-06-0199-10-A**	**06/03/14 09:35**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 18:37**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	116	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1096	**14-06-0199-11-A**	**06/03/14 09:37**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 18:57**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	151	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	155	50-130	2,7

#1097	**14-06-0199-12-A**	**06/03/14 09:40**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 19:16**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	560	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	143	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1097	**14-06-0199-12-A**	**06/03/14 09:40**	**Solid**	**GC 31**	**06/03/14**	**06/06/14 10:52**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3800	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	162	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	120	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1098	**14-06-0199-13-A**	**06/03/14 09:39**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 19:35**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	520	50	1.00	
Aroclor-1254	450	50	1.00	
Aroclor-1260	180	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-261**	**N/A**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 15:07**	**140603L19**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	115	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1096	**Sample**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 05:23**	**140603S12**
#1096	**Matrix Spike**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 03:16**	**140603S12**
#1096	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 03:32**	**140603S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	318.8	80	329.7	82	64-130	3	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1090	**Sample**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:55**	**140603S05**
#1090	**Matrix Spike**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:53**	**140603S05**
#1090	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:54**	**140603S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	13.09	52	14.16	57	50-115	8	0-20	
Arsenic	2.471	25.00	26.72	97	27.47	100	75-125	3	0-20	
Barium	119.2	25.00	144.2	4X	140.8	4X	75-125	4X	0-20	Q
Beryllium	0.3524	25.00	26.20	103	26.86	106	75-125	2	0-20	
Cadmium	ND	25.00	25.25	101	25.88	104	75-125	2	0-20	
Chromium	16.10	25.00	44.00	112	42.61	106	75-125	3	0-20	
Cobalt	10.20	25.00	35.77	102	36.47	105	75-125	2	0-20	
Copper	47.79	25.00	67.01	77	69.49	87	75-125	4	0-20	
Lead	12.53	25.00	36.97	98	40.53	112	75-125	9	0-20	
Molybdenum	ND	25.00	25.09	100	25.54	102	75-125	2	0-20	
Nickel	12.45	25.00	36.59	97	37.25	99	75-125	2	0-20	
Selenium	ND	25.00	20.66	83	21.05	84	75-125	2	0-20	
Silver	ND	12.50	12.98	104	13.30	106	75-125	2	0-20	
Thallium	ND	25.00	19.00	76	19.76	79	75-125	4	0-20	
Vanadium	33.51	25.00	56.79	93	60.09	106	75-125	6	0-20	
Zinc	71.22	25.00	96.48	101	97.42	105	75-125	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1090	**Sample**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:24**	**140604S01**
#1090	**Matrix Spike**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:27**	**140604S01**
#1090	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:29**	**140604S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	1.100	132	1.018	122	71-137	8	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
886-V-O-CS-001	**Sample**	**Concrete**	**GC 31**	**06/03/14**	**06/05/14 15:45**	**140603S19**
886-V-O-CS-001	**Matrix Spike**	**Concrete**	**GC 31**	**06/03/14**	**06/05/14 19:54**	**140603S19**
886-V-O-CS-001	**Matrix Spike Duplicate**	**Concrete**	**GC 31**	**06/03/14**	**06/05/14 20:13**	**140603S19**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	117.0	117	136.9	137	50-135	16	0-25	3
Aroclor-1260	ND	100.0	115.1	115	166.7	167	50-135	37	0-25	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-937	**LCS**	**Solid**	**GC 48**	**06/03/14**	**06/04/14 03:01**	**140603B12**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	375.3	94	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18446	**LCS**	**Solid**	**ICP 7300**	**06/03/14**	**06/04/14 12:21**	**140603L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	25.08	100	80-120	73-127	
Arsenic	25.00	23.89	96	80-120	73-127	
Barium	25.00	25.52	102	80-120	73-127	
Beryllium	25.00	24.20	97	80-120	73-127	
Cadmium	25.00	25.59	102	80-120	73-127	
Chromium	25.00	25.63	103	80-120	73-127	
Cobalt	25.00	27.65	111	80-120	73-127	
Copper	25.00	25.08	100	80-120	73-127	
Lead	25.00	25.53	102	80-120	73-127	
Molybdenum	25.00	25.21	101	80-120	73-127	
Nickel	25.00	26.83	107	80-120	73-127	
Selenium	25.00	21.97	88	80-120	73-127	
Silver	12.50	12.66	101	80-120	73-127	
Thallium	25.00	26.21	105	80-120	73-127	
Vanadium	25.00	24.70	99	80-120	73-127	
Zinc	25.00	25.40	102	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-285	**LCS**	**Solid**	**Mercury 05**	**06/04/14**	**06/04/14 17:22**	**140604L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.9563	115	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-261	**LCS**	**Solid**	**GC 31**	**06/03/14**	**06/05/14 15:26**	**140603L19**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	99.34	99	50-135	
Aroclor-1260	100.0	106.4	106	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-06-0199

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	842	GC 31	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-06-0199 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31350

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-3-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

14-06-0199

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

GEOTRACKER REQUIRED YES NO

LABORATORY PHONE NUMBER:

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-3-14	0725	886-V-0-CS-001	X			4oz glass jar	O			X		1	concrete
2		0730	886-V-0-CS-002	X				O			X		1	
3		0745	293-IIIA-P/S-CS-034	X				O			X		1	
4		0752	293-IIIA-P/S-CS-035	X				O			X		1	
5		0932	#1090	X	X	X		S			X		1	
6		0934	#1091	X	X	X		S			X		1	
7		0936	#1092	X	X	X		S			X		1	
8		0933	#1093	X	X	X		S			X		1	
9		0934	#1094	X	X	X		S			X		1	
10		0935	#1095	X	X	X		S			X		1	
11		0937	#1096	X	X	X		S			X		1	
12		0940	#1097	X	X	X		S			X		1	
13		0939	#1098	X				S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	6/3/14	1400	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/3/14	1400
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/3/14	1520	SIGNATURE: PRINTED NAME: Alan Peterson COMPANY: ECI	6/3/14	1520
SIGNATURE: PRINTED NAME: Alan Peterson COMPANY: ECI	6/3/14	1800	SIGNATURE: PRINTED NAME: Yeun COMPANY: ECI	6/3/14	1800

TOTAL NUMBER OF CONTAINERS: 13

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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eurofins | Calscience

WORK ORDER #: 14-06-0199

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/03/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 0.8 °C - 0.3 °C (CF) = 0.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** _____

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:**_____

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 14-06-0199

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/09/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Client Project Name: Former Pechiney Cast Plate / 0106270030
Work Order Number: 14-06-0199

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-06-0199 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 06/03/14. They were assigned to Work Order 14-06-0199.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0199
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	06/03/14 18:00
		Number of Containers:	13
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1098	14-06-0199-13	06/03/14 09:39	1	Solid

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1098	**14-06-0199-13-A**	**06/03/14 09:39**	**Solid**	**GC 48**	**06/06/14**	**06/07/14 00:42**	**140606B12B**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	5.7	5.0	1.00	
C19-C20	12	5.0	1.00	
C21-C22	13	5.0	1.00	
C23-C24	22	5.0	1.00	
C25-C28	31	5.0	1.00	
C29-C32	53	5.0	1.00	
C33-C36	44	5.0	1.00	
C37-C40	46	5.0	1.00	
C41-C44	28	5.0	1.00	
C6-C44 Total	260	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-946**	**N/A**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 19:10**	**140606B12B**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	80	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1098	**14-06-0199-13-A**	**06/03/14 09:39**	**Solid**	**ICP 7300**	**06/06/14**	**06/09/14 12:48**	**140606L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.45	0.750	1.00	
Barium	120	0.500	1.00	
Beryllium	0.367	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	18.3	0.250	1.00	
Cobalt	10.0	0.250	1.00	
Copper	51.0	0.500	1.00	
Lead	20.0	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	12.3	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	37.3	0.250	1.00	
Zinc	74.4	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18453**	**N/A**	**Solid**	**ICP 7300**	**06/06/14**	**06/09/14 12:45**	**140606L04**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1098	**14-06-0199-13-A**	**06/03/14 09:39**	**Solid**	**Mercury 05**	**06/09/14**	**06/09/14 14:05**	**140609L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.278	0.0833	1.00	

Method Blank	**099-16-272-292**	**N/A**	**Solid**	**Mercury 05**	**06/09/14**	**06/09/14 14:01**	**140609L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0413-6	**Sample**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 20:13**	**140606S12**
14-06-0413-6	**Matrix Spike**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 19:42**	**140606S12**
14-06-0413-6	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 19:57**	**140606S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	306.8	77	304.8	76	64-130	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1098	**Sample**	**Solid**	**ICP 7300**	**06/06/14**	**06/09/14 12:48**	**140606S04**
#1098	**Matrix Spike**	**Solid**	**ICP 7300**	**06/06/14**	**06/09/14 12:49**	**140606S04**
#1098	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/06/14**	**06/09/14 12:50**	**140606S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	15.52	62	15.59	62	50-115	0	0-20	
Arsenic	1.451	25.00	28.11	107	29.23	111	75-125	4	0-20	
Barium	120.4	25.00	140.9	4X	141.3	4X	75-125	4X	0-20	Q
Beryllium	0.3673	25.00	27.65	109	27.75	110	75-125	0	0-20	
Cadmium	ND	25.00	26.00	104	26.01	104	75-125	0	0-20	
Chromium	18.28	25.00	44.25	104	43.47	101	75-125	2	0-20	
Cobalt	10.03	25.00	36.04	104	36.15	104	75-125	0	0-20	
Copper	51.03	25.00	72.53	86	72.51	86	75-125	0	0-20	
Lead	20.03	25.00	42.58	90	44.48	98	75-125	4	0-20	
Molybdenum	ND	25.00	25.83	103	26.21	105	75-125	1	0-20	
Nickel	12.28	25.00	37.74	102	37.31	100	75-125	1	0-20	
Selenium	ND	25.00	21.61	86	21.41	86	75-125	1	0-20	
Silver	ND	12.50	13.52	108	13.70	110	75-125	1	0-20	
Thallium	ND	25.00	19.35	77	19.72	79	75-125	2	0-20	
Vanadium	37.34	25.00	62.97	103	61.76	98	75-125	2	0-20	
Zinc	74.38	25.00	101.3	108	94.97	82	75-125	6	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1098	**Sample**	**Solid**	**Mercury 05**	**06/09/14**	**06/09/14 14:05**	**140609S01**
#1098	**Matrix Spike**	**Solid**	**Mercury 05**	**06/09/14**	**06/09/14 14:07**	**140609S01**
#1098	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**06/09/14**	**06/09/14 14:10**	**140609S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.2777	0.8350	0.9775	84	0.9260	78	71-137	5	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-946	**LCS**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 19:26**	**140606B12B**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	341.7	85	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18453	**LCS**	**Solid**	**ICP 7300**	**06/06/14**	**06/09/14 12:46**	**140606L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	28.34	113	80-120	73-127	
Arsenic	25.00	25.68	103	80-120	73-127	
Barium	25.00	26.85	107	80-120	73-127	
Beryllium	25.00	26.03	104	80-120	73-127	
Cadmium	25.00	26.94	108	80-120	73-127	
Chromium	25.00	26.94	108	80-120	73-127	
Cobalt	25.00	28.74	115	80-120	73-127	
Copper	25.00	26.19	105	80-120	73-127	
Lead	25.00	26.97	108	80-120	73-127	
Molybdenum	25.00	26.23	105	80-120	73-127	
Nickel	25.00	28.03	112	80-120	73-127	
Selenium	25.00	23.10	92	80-120	73-127	
Silver	12.50	13.23	106	80-120	73-127	
Thallium	25.00	27.59	110	80-120	73-127	
Vanadium	25.00	25.99	104	80-120	73-127	
Zinc	25.00	26.86	107	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/03/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0199
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-292	**LCS**	**Solid**	**Mercury 05**	**06/09/14**	**06/09/14 14:03**	**140609L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.9054	108	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-06-0199

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-06-0199

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Friday, June 06, 2014 4:31 PM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate / 0106270030 / CEL 14-06-0199

Please add EPA 8015 and Title 22 metals for sample #1098 on a 24 hour TAT. Thanks,

Kim

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Friday, June 06, 2014 3:01 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate / 0106270030 / CEL 14-06-0199

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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NB 31350

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-3-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

14-06-0199

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

GEOTRACKER REQUIRED YES NO

LABORATORY PHONE NUMBER:

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-3-14	0725	886-V-0-CS-001	X			4oz glass jar	O			X		1	concrete
2		0730	886-V-0-CS-002	X				O			X		1	
3		0745	293-IIIA-P/S-CS-034	X				O			X		1	
4		0752	293-IIIA-P/S-CS-035	X				O			X		1	
5		0932	#1090	X	X	X		S			X		1	
6		0934	#1091	X	X	X		S			X		1	
7		0936	#1092	X	X	X		S			X		1	
8		0933	#1093	X	X	X		S			X		1	
9		0934	#1094	X	X	X		S			X		1	
10		0935	#1095	X	X	X		S			X		1	
11		0937	#1096	X	X	X		S			X		1	
12		0940	#1097	X	X	X		S			X		1	
13		0939	#1098	X				S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	6/3/14	1400	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/3/14	1400
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/3/14	1520	SIGNATURE: PRINTED NAME: Yuen Petersen COMPANY: ECI	6/3/14	1520
SIGNATURE: PRINTED NAME: Yuen Petersen COMPANY: ECI	6/3/14	1800	SIGNATURE: PRINTED NAME: Yuen COMPANY: ECI	6/3/14	1800

TOTAL NUMBER OF CONTAINERS: 13

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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WORK ORDER #: 14-06-0199

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/03/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 0.8 °C - 0.3 °C (CF) = 0.5 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 828

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 828

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** _____

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:**_____

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WORK ORDER NUMBER: 14-06-0415

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/10/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Narrative

Work Order: 14-06-0415 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/05/14. They were assigned to Work Order 14-06-0415.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/05/14 17:15
		Number of Containers:	10
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1116	14-06-0415-1	06/05/14 09:24	1	Solid
#1117	14-06-0415-2	06/05/14 09:25	1	Solid
#1118	14-06-0415-3	06/05/14 09:26	1	Solid
#1119	14-06-0415-4	06/05/14 09:28	1	Solid
#1120	14-06-0415-5	06/05/14 09:29	1	Solid
#1121	14-06-0415-6	06/05/14 09:29	1	Solid
#1122	14-06-0415-7	06/05/14 13:29	1	Solid
#1123	14-06-0415-8	06/05/14 13:40	1	Solid
#1124	14-06-0415-9	06/05/14 13:55	1	Solid
755-IV-F/F-SS-001	14-06-0415-10	06/05/14 14:16	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/05/14
Attn:	Linda Conlan		Page 1 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1116 (14-06-0415-1)						
Arsenic	1.08		0.728	mg/kg	EPA 6010B	EPA 3050B
Barium	109		0.485	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.330		0.243	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.9		0.243	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.1		0.243	mg/kg	EPA 6010B	EPA 3050B
Copper	14.6		0.485	mg/kg	EPA 6010B	EPA 3050B
Lead	1.67		0.485	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.4		0.243	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.7		0.243	mg/kg	EPA 6010B	EPA 3050B
Zinc	50.5		0.971	mg/kg	EPA 6010B	EPA 3050B
#1117 (14-06-0415-2)						
Arsenic	1.38		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	137		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.326		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	24.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	30.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	110		1.00	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	120		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/05/14
Attn:	Linda Conlan		Page 2 of 4

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1118 (14-06-0415-3)						
Antimony	27.6		0.735	mg/kg	EPA 6010B	EPA 3050B
Arsenic	2.43		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	245		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.369		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	20.9		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.3		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	156		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	613		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	18.8		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.7		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	297		0.980	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0942		0.0862	mg/kg	EPA 7471A	EPA 7471A Total
C23-C24	43		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	39		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	39		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	18		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	8.4		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	150		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1119 (14-06-0415-4)						
Arsenic	0.933		0.725	mg/kg	EPA 6010B	EPA 3050B
Barium	143		0.483	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.334		0.242	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.0		0.242	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.4		0.242	mg/kg	EPA 6010B	EPA 3050B
Copper	22.0		0.483	mg/kg	EPA 6010B	EPA 3050B
Lead	12.5		0.483	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.7		0.242	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.9		0.242	mg/kg	EPA 6010B	EPA 3050B
Zinc	116		0.966	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/05/14
Attn:	Linda Conlan		Page 3 of 4

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1120 (14-06-0415-5)						
Arsenic	2.01		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	536		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.293		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.1		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.53		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	1060		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	679		0.493	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.720		0.246	mg/kg	EPA 6010B	EPA 3050B
Nickel	17.3		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.6		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	633		0.985	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.165		0.0806	mg/kg	EPA 7471A	EPA 7471A Total
C21-C22	20		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	47		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	60		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	67		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	27		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	5.9		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	240		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1121 (14-06-0415-6)						
Arsenic	1.56		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.352		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.5		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.8		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	20.4		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	11.1		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	16.2		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.4		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	64.7		0.990	mg/kg	EPA 6010B	EPA 3050B
C25-C28	5.6		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	7.0		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	21		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	150		51	ug/kg	EPA 8082	EPA 3540C
#1123 (14-06-0415-8)						
Arsenic	1.86		0.721	mg/kg	EPA 6010B	EPA 3050B

* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/05/14
Attn:	Linda Conlan		Page 4 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1124 (14-06-0415-9)						
Arsenic	3.12		0.735	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1116	**14-06-0415-1-A**	**06/05/14 09:24**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 17:19**	**140606B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	76	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1117	**14-06-0415-2-A**	**06/05/14 09:25**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 17:35**	**140606B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	74	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1118	**14-06-0415-3-A**	**06/05/14 09:26**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 17:51**	**140606B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	ND	5.1	1.00	
C21-C22	ND	5.1	1.00	
C23-C24	43	5.1	1.00	
C25-C28	39	5.1	1.00	
C29-C32	39	5.1	1.00	
C33-C36	18	5.1	1.00	
C37-C40	8.4	5.1	1.00	
C41-C44	ND	5.1	1.00	
C6-C44 Total	150	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	63	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1119	**14-06-0415-4-A**	**06/05/14 09:28**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 18:07**	**140606B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	67	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1120	**14-06-0415-5-A**	**06/05/14 09:29**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 18:23**	**140606B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	20	5.0	1.00	
C23-C24	47	5.0	1.00	
C25-C28	60	5.0	1.00	
C29-C32	67	5.0	1.00	
C33-C36	27	5.0	1.00	
C37-C40	15	5.0	1.00	
C41-C44	5.9	5.0	1.00	
C6-C44 Total	240	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	69	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1121	**14-06-0415-6-A**	**06/05/14 09:29**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 18:39**	**140606B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	5.6	4.9	1.00	
C29-C32	7.0	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	21	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	69	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-945**	**N/A**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 12:17**	**140606B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	78	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1123	**14-06-0415-8-A**	**06/05/14 13:40**	**Solid**	**ICP 7300**	**06/05/14**	**06/10/14 14:23**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.86	0.721	0.962	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1124	**14-06-0415-9-A**	**06/05/14 13:55**	**Solid**	**ICP 7300**	**06/05/14**	**06/10/14 14:24**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	3.12	0.735	0.980	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18455**	**N/A**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:19**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1116	**14-06-0415-1-A**	**06/05/14 09:24**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:11**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.728	0.971	
Arsenic	1.08	0.728	0.971	
Barium	109	0.485	0.971	
Beryllium	0.330	0.243	0.971	
Cadmium	ND	0.485	0.971	
Chromium	13.9	0.243	0.971	
Cobalt	10.1	0.243	0.971	
Copper	14.6	0.485	0.971	
Lead	1.67	0.485	0.971	
Molybdenum	ND	0.243	0.971	
Nickel	10.4	0.243	0.971	
Selenium	ND	0.728	0.971	
Silver	ND	0.243	0.971	
Thallium	ND	0.728	0.971	
Vanadium	31.7	0.243	0.971	
Zinc	50.5	0.971	0.971	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1117	**14-06-0415-2-A**	**06/05/14 09:25**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:12**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.38	0.750	1.00	
Barium	137	0.500	1.00	
Beryllium	0.326	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	17.8	0.250	1.00	
Cobalt	10.7	0.250	1.00	
Copper	24.6	0.500	1.00	
Lead	30.4	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	13.4	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	33.0	0.250	1.00	
Zinc	110	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1118	**14-06-0415-3-A**	**06/05/14 09:26**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:13**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	27.6	0.735	0.980	
Arsenic	2.43	0.735	0.980	
Barium	245	0.490	0.980	
Beryllium	0.369	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	20.9	0.245	0.980	
Cobalt	12.3	0.245	0.980	
Copper	156	0.490	0.980	
Lead	613	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	18.8	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	35.7	0.245	0.980	
Zinc	297	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1119	**14-06-0415-4-A**	**06/05/14 09:28**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:19**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.725	0.966	
Arsenic	0.933	0.725	0.966	
Barium	143	0.483	0.966	
Beryllium	0.334	0.242	0.966	
Cadmium	ND	0.483	0.966	
Chromium	16.0	0.242	0.966	
Cobalt	12.4	0.242	0.966	
Copper	22.0	0.483	0.966	
Lead	12.5	0.483	0.966	
Molybdenum	ND	0.242	0.966	
Nickel	12.7	0.242	0.966	
Selenium	ND	0.725	0.966	
Silver	ND	0.242	0.966	
Thallium	ND	0.725	0.966	
Vanadium	32.9	0.242	0.966	
Zinc	116	0.966	0.966	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1120	**14-06-0415-5-A**	**06/05/14 09:29**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:20**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	2.01	0.739	0.985	
Barium	536	0.493	0.985	
Beryllium	0.293	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	18.1	0.246	0.985	
Cobalt	9.53	0.246	0.985	
Copper	1060	0.493	0.985	
Lead	679	0.493	0.985	
Molybdenum	0.720	0.246	0.985	
Nickel	17.3	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	29.6	0.246	0.985	
Zinc	633	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1121	**14-06-0415-6-A**	**06/05/14 09:29**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:21**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	1.56	0.743	0.990	
Barium	129	0.495	0.990	
Beryllium	0.352	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	17.5	0.248	0.990	
Cobalt	12.8	0.248	0.990	
Copper	20.4	0.495	0.990	
Lead	11.1	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	16.2	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	32.4	0.248	0.990	
Zinc	64.7	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18455**	**N/A**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:19**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1116	**14-06-0415-1-A**	**06/05/14 09:24**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:31**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

#1117	**14-06-0415-2-A**	**06/05/14 09:25**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:33**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#1118	**14-06-0415-3-A**	**06/05/14 09:26**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:36**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0942	0.0862	1.00	

#1119	**14-06-0415-4-A**	**06/05/14 09:28**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:38**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

#1120	**14-06-0415-5-A**	**06/05/14 09:29**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:40**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.165	0.0806	1.00	

#1121	**14-06-0415-6-A**	**06/05/14 09:29**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:42**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Method Blank	**099-16-272-291**	**N/A**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 15:55**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1116	**14-06-0415-1-A**	**06/05/14 09:24**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 04:14**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#1117	**14-06-0415-2-A**	**06/05/14 09:25**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 04:33**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	120	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1118	**14-06-0415-3-A**	**06/05/14 09:26**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 04:52**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

#1119	**14-06-0415-4-A**	**06/05/14 09:28**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 05:11**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1120	**14-06-0415-5-A**	**06/05/14 09:29**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 05:31**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

#1121	**14-06-0415-6-A**	**06/05/14 09:29**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 05:50**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	150	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1122	**14-06-0415-7-A**	**06/05/14 13:29**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 06:09**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

755-IV-F/F-SS-001	**14-06-0415-10-A**	**06/05/14 14:16**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 06:28**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-262**	**N/A**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 02:58**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0418-1	**Sample**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 13:20**	**140606S01**
14-06-0418-1	**Matrix Spike**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 12:49**	**140606S01**
14-06-0418-1	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 13:05**	**140606S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	314.7	79	318.2	80	55-133	1	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0418-1	**Sample**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:24**	**140605S05**
14-06-0418-1	**Matrix Spike**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:25**	**140605S05**
14-06-0418-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:26**	**140605S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	9.061	36	8.937	36	50-115	1	0-20	3
Arsenic	3.350	25.00	27.16	95	27.72	97	75-125	2	0-20	
Barium	186.8	25.00	197.3	4X	206.7	4X	75-125	4X	0-20	Q
Beryllium	0.6216	25.00	26.49	103	26.79	105	75-125	1	0-20	
Cadmium	ND	25.00	25.06	100	25.19	101	75-125	1	0-20	
Chromium	22.74	25.00	48.08	101	50.02	109	75-125	4	0-20	
Cobalt	9.878	25.00	34.46	98	35.85	104	75-125	4	0-20	
Copper	19.25	25.00	44.35	100	46.18	108	75-125	4	0-20	
Lead	2.871	25.00	26.86	96	27.38	98	75-125	2	0-20	
Molybdenum	1.221	25.00	22.53	85	23.27	88	75-125	3	0-20	
Nickel	11.45	25.00	35.13	95	37.08	103	75-125	5	0-20	
Selenium	ND	25.00	17.71	71	19.46	78	75-125	9	0-20	3
Silver	ND	12.50	12.53	100	12.66	101	75-125	1	0-20	
Thallium	ND	25.00	19.15	77	19.84	79	75-125	4	0-20	
Vanadium	45.41	25.00	71.62	105	71.85	106	75-125	0	0-20	
Zinc	78.37	25.00	102.7	97	104.4	104	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0419-6	**Sample**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:00**	**140606S01**
14-06-0419-6	**Matrix Spike**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:02**	**140606S01**
14-06-0419-6	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:04**	**140606S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.9549	114	0.9388	112	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1120	**Sample**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 05:31**	**140605S24**
#1120	**Matrix Spike**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 03:36**	**140605S24**
#1120	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 03:55**	**140605S24**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	95.10	95	95.67	96	50-135	1	0-25	
Aroclor-1260	ND	100.0	96.07	96	92.29	92	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-945	**LCS**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 12:33**	**140606B01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	322.6	81	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18455	**LCS**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:23**	**140605L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.82	99	80-120	73-127	
Arsenic	25.00	23.94	96	80-120	73-127	
Barium	25.00	25.36	101	80-120	73-127	
Beryllium	25.00	24.49	98	80-120	73-127	
Cadmium	25.00	25.53	102	80-120	73-127	
Chromium	25.00	25.24	101	80-120	73-127	
Cobalt	25.00	27.65	111	80-120	73-127	
Copper	25.00	25.71	103	80-120	73-127	
Lead	25.00	25.18	101	80-120	73-127	
Molybdenum	25.00	25.42	102	80-120	73-127	
Nickel	25.00	26.43	106	80-120	73-127	
Selenium	25.00	22.40	90	80-120	73-127	
Silver	12.50	12.55	100	80-120	73-127	
Thallium	25.00	26.59	106	80-120	73-127	
Vanadium	25.00	24.38	98	80-120	73-127	
Zinc	25.00	25.55	102	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-291	**LCS**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 15:58**	**140606L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.9229	111	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-262	**LCS**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 03:17**	**140605L24**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	83.34	83	50-135	
Aroclor-1260	100.0	90.54	91	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-0415

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	842	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-0415

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31353

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 6-5-14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-06-0415
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	Title 22 Metals	EPA 6010-Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-5-14	0924	#1116	X	X	X		4oz glass jar	S			X		1	
2		0925	#1117	X	X	X			S			X		1	
3		0926	#1118	X	X	X			S			X		1	
4		0928	#1119	X	X	X			S			X		1	
5		0929	#1120	X	X	X			S			X		1	
6		0929	#1121	X	X	X			S			X		1	
7		1329	#1122	X					S			X		1	
8		1340	#1123				X		S			X		1	
9		1355	#1124				X		S			X		1	
10		1416	755-IV-F/F-SS-001	X					S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	6/5/14	1400	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	6/5/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	6/5/14	1530	SIGNATURE: PRINTED NAME: D. Ferguson COMPANY: ECI	6/05/14	15:30
SIGNATURE: PRINTED NAME: D. Ferguson COMPANY: ECI	6/05/14	17.15	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	6/5/14	1715

TOTAL NUMBER OF CONTAINERS: 10

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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WORK ORDER #: 14-06-0415

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/05/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.0 °C - 0.3 °C (CF) = 2.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 806

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 806

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 802

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Supplemental Report 1

The original report has been revised/corrected.

WORK ORDER NUMBER: 14-06-0415

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/13/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-06-0415

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Work Order Narrative

Work Order: 14-06-0415 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/05/14. They were assigned to Work Order 14-06-0415.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/05/14 17:15
		Number of Containers:	10
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1116	14-06-0415-1	06/05/14 09:24	1	Solid
#1117	14-06-0415-2	06/05/14 09:25	1	Solid
#1118	14-06-0415-3	06/05/14 09:26	1	Solid
#1119	14-06-0415-4	06/05/14 09:28	1	Solid
#1120	14-06-0415-5	06/05/14 09:29	1	Solid
#1121	14-06-0415-6	06/05/14 09:29	1	Solid
#1122	14-06-0415-7	06/05/14 13:29	1	Solid
#1123	14-06-0415-8	06/05/14 13:40	1	Solid
#1124	14-06-0415-9	06/05/14 13:55	1	Solid
755-IV-F/F-SS-002	14-06-0415-10	06/05/14 14:16	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/05/14
Attn:	Linda Conlan		Page 1 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1116 (14-06-0415-1)						
Arsenic	1.08		0.728	mg/kg	EPA 6010B	EPA 3050B
Barium	109		0.485	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.330		0.243	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.9		0.243	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.1		0.243	mg/kg	EPA 6010B	EPA 3050B
Copper	14.6		0.485	mg/kg	EPA 6010B	EPA 3050B
Lead	1.67		0.485	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.4		0.243	mg/kg	EPA 6010B	EPA 3050B
Vanadium	31.7		0.243	mg/kg	EPA 6010B	EPA 3050B
Zinc	50.5		0.971	mg/kg	EPA 6010B	EPA 3050B
#1117 (14-06-0415-2)						
Arsenic	1.38		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	137		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.326		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	24.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	30.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	33.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	110		1.00	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	120		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/05/14
Attn:	Linda Conlan		Page 2 of 4

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1118 (14-06-0415-3)						
Antimony	27.6		0.735	mg/kg	EPA 6010B	EPA 3050B
Arsenic	2.43		0.735	mg/kg	EPA 6010B	EPA 3050B
Barium	245		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.369		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	20.9		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.3		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	156		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	613		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	18.8		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.7		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	297		0.980	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0942		0.0862	mg/kg	EPA 7471A	EPA 7471A Total
C23-C24	43		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	39		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	39		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	18		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	8.4		5.1	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	150		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1119 (14-06-0415-4)						
Arsenic	0.933		0.725	mg/kg	EPA 6010B	EPA 3050B
Barium	143		0.483	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.334		0.242	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.0		0.242	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.4		0.242	mg/kg	EPA 6010B	EPA 3050B
Copper	22.0		0.483	mg/kg	EPA 6010B	EPA 3050B
Lead	12.5		0.483	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.7		0.242	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.9		0.242	mg/kg	EPA 6010B	EPA 3050B
Zinc	116		0.966	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/05/14
Attn:	Linda Conlan		Page 3 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1120 (14-06-0415-5)						
Arsenic	2.01		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	536		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.293		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.1		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	9.53		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	1060		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	679		0.493	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.720		0.246	mg/kg	EPA 6010B	EPA 3050B
Nickel	17.3		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	29.6		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	633		0.985	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.165		0.0806	mg/kg	EPA 7471A	EPA 7471A Total
C21-C22	20		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	47		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	60		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	67		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	27		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	5.9		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	240		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1121 (14-06-0415-6)						
Arsenic	1.56		0.743	mg/kg	EPA 6010B	EPA 3050B
Barium	129		0.495	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.352		0.248	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.5		0.248	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.8		0.248	mg/kg	EPA 6010B	EPA 3050B
Copper	20.4		0.495	mg/kg	EPA 6010B	EPA 3050B
Lead	11.1		0.495	mg/kg	EPA 6010B	EPA 3050B
Nickel	16.2		0.248	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.4		0.248	mg/kg	EPA 6010B	EPA 3050B
Zinc	64.7		0.990	mg/kg	EPA 6010B	EPA 3050B
C25-C28	5.6		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	7.0		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	21		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	150		51	ug/kg	EPA 8082	EPA 3540C
#1123 (14-06-0415-8)						
Arsenic	1.86		0.721	mg/kg	EPA 6010B	EPA 3050B

* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0415
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/05/14
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1124 (14-06-0415-9)						
Arsenic	3.12		0.735	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1116	**14-06-0415-1-A**	**06/05/14 09:24**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 17:19**	**140606B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	76	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1117	**14-06-0415-2-A**	**06/05/14 09:25**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 17:35**	**140606B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	74	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1118	**14-06-0415-3-A**	**06/05/14 09:26**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 17:51**	**140606B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	ND	5.1	1.00	
C21-C22	ND	5.1	1.00	
C23-C24	43	5.1	1.00	
C25-C28	39	5.1	1.00	
C29-C32	39	5.1	1.00	
C33-C36	18	5.1	1.00	
C37-C40	8.4	5.1	1.00	
C41-C44	ND	5.1	1.00	
C6-C44 Total	150	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	63	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1119	**14-06-0415-4-A**	**06/05/14 09:28**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 18:07**	**140606B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	67	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1120	**14-06-0415-5-A**	**06/05/14 09:29**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 18:23**	**140606B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	20	5.0	1.00	
C23-C24	47	5.0	1.00	
C25-C28	60	5.0	1.00	
C29-C32	67	5.0	1.00	
C33-C36	27	5.0	1.00	
C37-C40	15	5.0	1.00	
C41-C44	5.9	5.0	1.00	
C6-C44 Total	240	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	69	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1121	**14-06-0415-6-A**	**06/05/14 09:29**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 18:39**	**140606B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	5.6	4.9	1.00	
C29-C32	7.0	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	21	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	69	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-945**	**N/A**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 12:17**	**140606B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	78	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1123	**14-06-0415-8-A**	**06/05/14 13:40**	**Solid**	**ICP 7300**	**06/05/14**	**06/10/14 14:23**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.86	0.721	0.962	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1124	**14-06-0415-9-A**	**06/05/14 13:55**	**Solid**	**ICP 7300**	**06/05/14**	**06/10/14 14:24**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	3.12	0.735	0.980	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18455**	**N/A**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:19**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1116	**14-06-0415-1-A**	**06/05/14 09:24**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:11**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.728	0.971	
Arsenic	1.08	0.728	0.971	
Barium	109	0.485	0.971	
Beryllium	0.330	0.243	0.971	
Cadmium	ND	0.485	0.971	
Chromium	13.9	0.243	0.971	
Cobalt	10.1	0.243	0.971	
Copper	14.6	0.485	0.971	
Lead	1.67	0.485	0.971	
Molybdenum	ND	0.243	0.971	
Nickel	10.4	0.243	0.971	
Selenium	ND	0.728	0.971	
Silver	ND	0.243	0.971	
Thallium	ND	0.728	0.971	
Vanadium	31.7	0.243	0.971	
Zinc	50.5	0.971	0.971	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1117	**14-06-0415-2-A**	**06/05/14 09:25**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:12**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	1.38	0.750	1.00	
Barium	137	0.500	1.00	
Beryllium	0.326	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	17.8	0.250	1.00	
Cobalt	10.7	0.250	1.00	
Copper	24.6	0.500	1.00	
Lead	30.4	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	13.4	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	33.0	0.250	1.00	
Zinc	110	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1118	**14-06-0415-3-A**	**06/05/14 09:26**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:13**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	27.6	0.735	0.980	
Arsenic	2.43	0.735	0.980	
Barium	245	0.490	0.980	
Beryllium	0.369	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	20.9	0.245	0.980	
Cobalt	12.3	0.245	0.980	
Copper	156	0.490	0.980	
Lead	613	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	18.8	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	35.7	0.245	0.980	
Zinc	297	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1119	**14-06-0415-4-A**	**06/05/14 09:28**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:19**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.725	0.966	
Arsenic	0.933	0.725	0.966	
Barium	143	0.483	0.966	
Beryllium	0.334	0.242	0.966	
Cadmium	ND	0.483	0.966	
Chromium	16.0	0.242	0.966	
Cobalt	12.4	0.242	0.966	
Copper	22.0	0.483	0.966	
Lead	12.5	0.483	0.966	
Molybdenum	ND	0.242	0.966	
Nickel	12.7	0.242	0.966	
Selenium	ND	0.725	0.966	
Silver	ND	0.242	0.966	
Thallium	ND	0.725	0.966	
Vanadium	32.9	0.242	0.966	
Zinc	116	0.966	0.966	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1120	**14-06-0415-5-A**	**06/05/14 09:29**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:20**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	2.01	0.739	0.985	
Barium	536	0.493	0.985	
Beryllium	0.293	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	18.1	0.246	0.985	
Cobalt	9.53	0.246	0.985	
Copper	1060	0.493	0.985	
Lead	679	0.493	0.985	
Molybdenum	0.720	0.246	0.985	
Nickel	17.3	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	29.6	0.246	0.985	
Zinc	633	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1121	**14-06-0415-6-A**	**06/05/14 09:29**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 20:21**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.743	0.990	
Arsenic	1.56	0.743	0.990	
Barium	129	0.495	0.990	
Beryllium	0.352	0.248	0.990	
Cadmium	ND	0.495	0.990	
Chromium	17.5	0.248	0.990	
Cobalt	12.8	0.248	0.990	
Copper	20.4	0.495	0.990	
Lead	11.1	0.495	0.990	
Molybdenum	ND	0.248	0.990	
Nickel	16.2	0.248	0.990	
Selenium	ND	0.743	0.990	
Silver	ND	0.248	0.990	
Thallium	ND	0.743	0.990	
Vanadium	32.4	0.248	0.990	
Zinc	64.7	0.990	0.990	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18455**	**N/A**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:19**	**140605L05**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1116	**14-06-0415-1-A**	**06/05/14 09:24**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:31**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

#1117	**14-06-0415-2-A**	**06/05/14 09:25**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:33**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

#1118	**14-06-0415-3-A**	**06/05/14 09:26**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:36**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0942	0.0862	1.00	

#1119	**14-06-0415-4-A**	**06/05/14 09:28**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:38**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

#1120	**14-06-0415-5-A**	**06/05/14 09:29**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:40**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.165	0.0806	1.00	

#1121	**14-06-0415-6-A**	**06/05/14 09:29**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:42**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

Method Blank	**099-16-272-291**	**N/A**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 15:55**	**140606L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1116	**14-06-0415-1-A**	**06/05/14 09:24**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 04:14**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#1117	**14-06-0415-2-A**	**06/05/14 09:25**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 04:33**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	120	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1118	**14-06-0415-3-A**	**06/05/14 09:26**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 04:52**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

#1119	**14-06-0415-4-A**	**06/05/14 09:28**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 05:11**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1120	**14-06-0415-5-A**	**06/05/14 09:29**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 05:31**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

#1121	**14-06-0415-6-A**	**06/05/14 09:29**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 05:50**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	150	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1122	**14-06-0415-7-A**	**06/05/14 13:29**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 06:09**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

755-IV-F/F-SS-002	**14-06-0415-10-A**	**06/05/14 14:16**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 06:28**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-262**	**N/A**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 02:58**	**140605L24**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0418-1	**Sample**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 13:20**	**140606S01**
14-06-0418-1	**Matrix Spike**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 12:49**	**140606S01**
14-06-0418-1	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 13:05**	**140606S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	314.7	79	318.2	80	55-133	1	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0418-1	**Sample**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:24**	**140605S05**
14-06-0418-1	**Matrix Spike**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:25**	**140605S05**
14-06-0418-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:26**	**140605S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	9.061	36	8.937	36	50-115	1	0-20	3
Arsenic	3.350	25.00	27.16	95	27.72	97	75-125	2	0-20	
Barium	186.8	25.00	197.3	4X	206.7	4X	75-125	4X	0-20	Q
Beryllium	0.6216	25.00	26.49	103	26.79	105	75-125	1	0-20	
Cadmium	ND	25.00	25.06	100	25.19	101	75-125	1	0-20	
Chromium	22.74	25.00	48.08	101	50.02	109	75-125	4	0-20	
Cobalt	9.878	25.00	34.46	98	35.85	104	75-125	4	0-20	
Copper	19.25	25.00	44.35	100	46.18	108	75-125	4	0-20	
Lead	2.871	25.00	26.86	96	27.38	98	75-125	2	0-20	
Molybdenum	1.221	25.00	22.53	85	23.27	88	75-125	3	0-20	
Nickel	11.45	25.00	35.13	95	37.08	103	75-125	5	0-20	
Selenium	ND	25.00	17.71	71	19.46	78	75-125	9	0-20	3
Silver	ND	12.50	12.53	100	12.66	101	75-125	1	0-20	
Thallium	ND	25.00	19.15	77	19.84	79	75-125	4	0-20	
Vanadium	45.41	25.00	71.62	105	71.85	106	75-125	0	0-20	
Zinc	78.37	25.00	102.7	97	104.4	104	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0419-6	**Sample**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:00**	**140606S01**
14-06-0419-6	**Matrix Spike**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:02**	**140606S01**
14-06-0419-6	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 16:04**	**140606S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.9549	114	0.9388	112	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1120	**Sample**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 05:31**	**140605S24**
#1120	**Matrix Spike**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 03:36**	**140605S24**
#1120	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 03:55**	**140605S24**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	95.10	95	95.67	96	50-135	1	0-25	
Aroclor-1260	ND	100.0	96.07	96	92.29	92	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-945	**LCS**	**Solid**	**GC 48**	**06/06/14**	**06/06/14 12:33**	**140606B01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	322.6	81	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18455	**LCS**	**Solid**	**ICP 7300**	**06/05/14**	**06/06/14 18:23**	**140605L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	24.82	99	80-120	73-127	
Arsenic	25.00	23.94	96	80-120	73-127	
Barium	25.00	25.36	101	80-120	73-127	
Beryllium	25.00	24.49	98	80-120	73-127	
Cadmium	25.00	25.53	102	80-120	73-127	
Chromium	25.00	25.24	101	80-120	73-127	
Cobalt	25.00	27.65	111	80-120	73-127	
Copper	25.00	25.71	103	80-120	73-127	
Lead	25.00	25.18	101	80-120	73-127	
Molybdenum	25.00	25.42	102	80-120	73-127	
Nickel	25.00	26.43	106	80-120	73-127	
Selenium	25.00	22.40	90	80-120	73-127	
Silver	12.50	12.55	100	80-120	73-127	
Thallium	25.00	26.59	106	80-120	73-127	
Vanadium	25.00	24.38	98	80-120	73-127	
Zinc	25.00	25.55	102	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-291	**LCS**	**Solid**	**Mercury 05**	**06/06/14**	**06/06/14 15:58**	**140606L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.9229	111	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/05/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0415
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-262	**LCS**	**Solid**	**GC 31**	**06/05/14**	**06/07/14 03:17**	**140605L24**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	83.34	83	50-135	
Aroclor-1260	100.0	90.54	91	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-0415

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	842	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-0415 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Lee, Zhur [zhur.lee@amec.com]
Sent: Friday, June 13, 2014 11:29 AM
To: Maricris dela Rosa; Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen
Cc: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-0415

Maricris/Stephen,

Please revise sample ID 755-IV-F/F-SS-001 on report 14-06-0415 to 755-IV-F/F-SS-002 and provide an updated report once the revision is made.

Thank you,

Zhur Lee
Project Coordinator
AMEC
Environment & Infrastructure
121 Innovation Drive, Suite 200, Irvine, CA 92617
Tel 949-642-0245 x1591, Fax 949-642-4474
zhur.lee@amec.com

From: Maricris dela Rosa [mailto:MaricrisdelaRosa@eurofinsUS.com]
Sent: Tuesday, June 10, 2014 4:01 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-0415

Report and EDD attached.

Thank you,
Maricris Dela Rosa
Project Manager Assistant

Eurofins Calscience,Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
USA
Phone: +1 (714) 895-5494
Email: maricrisdelarosa@eurofinsus.com
website: www.calscience.com

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CHAIN-OF-CUSTODY RECORD

NB 31353

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-5-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-06-0415

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	Title 22 Metals	EPA 6010-Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-5-14	0924	#1116	X	X	X		4oz glass jar	S			X		1	
2		0925	#1117	X	X	X			S			X		1	
3		0926	#1118	X	X	X			S			X		1	
4		0928	#1119	X	X	X			S			X		1	
5		0929	#1120	X	X	X			S			X		1	
6		0929	#1121	X	X	X			S			X		1	
7		1329	#1122	X					S			X		1	
8		1340	#1123				X		S			X		1	
9		1355	#1124				X		S			X		1	
10		1416	755-IV-F/F-SS-001	X					S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	6/5/14	1400	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	6/5/14	1400
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	6/5/14	1530	SIGNATURE: PRINTED NAME: D. Ferguson COMPANY: ECI	6/05/14	15.30
SIGNATURE: PRINTED NAME: D. Ferguson COMPANY: ECI	6/05/14	17.15	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: CEL	6/5/14	1715

TOTAL NUMBER OF CONTAINERS: 10

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-06-0415

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/05/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.0 °C - 0.3 °C (CF) = 2.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 806

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 806

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 802

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 802

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WORK ORDER NUMBER: 14-06-0664

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/11/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-06-0664

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5 Quality Control Sample Data. 14
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5.2 LCS/LCSD. 15

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Work Order Narrative

Work Order: 14-06-0664 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/09/14. They were assigned to Work Order 14-06-0664.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0664
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/09/14 17:41
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
901-IIB-P/S-SS-003	14-06-0664-1	06/09/14 08:40	1	Solid
901-IIB-P/S-SS-004	14-06-0664-2	06/09/14 08:42	1	Solid
901-IIB-P/S-SS-005	14-06-0664-3	06/09/14 08:44	1	Solid
901-IIB-P/S-SS-006	14-06-0664-4	06/09/14 08:46	1	Solid
901-IIB-P/S-SS-007	14-06-0664-5	06/09/14 08:47	1	Solid
901-IIB-P/S-SS-008	14-06-0664-6	06/09/14 08:48	1	Solid
901-IIB-P/S-SS-009	14-06-0664-7	06/09/14 08:49	1	Solid
293-IIIA-P/S-SS-016	14-06-0664-8	06/09/14 13:20	1	Solid
293-IIIA-P/S-SS-017	14-06-0664-9	06/09/14 13:25	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-0664
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/09/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
901-IIB-P/S-SS-003 (14-06-0664-1)						
Aroclor-1248	43000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2600		500	ug/kg	EPA 8082	EPA 3540C
901-IIB-P/S-SS-004 (14-06-0664-2)						
Aroclor-1248	710		50	ug/kg	EPA 8082	EPA 3540C
901-IIB-P/S-SS-005 (14-06-0664-3)						
Aroclor-1248	1800		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	100		50	ug/kg	EPA 8082	EPA 3540C
901-IIB-P/S-SS-006 (14-06-0664-4)						
Aroclor-1248	130000		25000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	3600		500	ug/kg	EPA 8082	EPA 3540C
901-IIB-P/S-SS-007 (14-06-0664-5)						
Aroclor-1248	1300		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	54		50	ug/kg	EPA 8082	EPA 3540C
901-IIB-P/S-SS-008 (14-06-0664-6)						
Aroclor-1248	5100		510	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	270		51	ug/kg	EPA 8082	EPA 3540C
901-IIB-P/S-SS-009 (14-06-0664-7)						
Aroclor-1248	9800		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	740		50	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-016 (14-06-0664-8)						
Aroclor-1248	630		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	60		50	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-SS-017 (14-06-0664-9)						
Aroclor-1248	770		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	57		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-003	**14-06-0664-1-A**	**06/09/14 08:40**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 10:19**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	2600	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	134	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

901-IIB-P/S-SS-003	**14-06-0664-1-A**	**06/09/14 08:40**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 10:39**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	43000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	173	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	146	50-130	1,2,7

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-004	**14-06-0664-2-A**	**06/09/14 08:42**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 10:58**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	710	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

901-IIB-P/S-SS-005	**14-06-0664-3-A**	**06/09/14 08:44**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 11:17**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	100	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-005	**14-06-0664-3-A**	**06/09/14 08:44**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 11:36**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1800	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	130	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-006	**14-06-0664-4-A**	**06/09/14 08:46**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 11:55**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	3600	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-006	**14-06-0664-4-A**	**06/09/14 08:46**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 12:14**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	130000	25000	500	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	420	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	230	50-130	1,2,7

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-007	**14-06-0664-5-A**	**06/09/14 08:47**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 12:33**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	54	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

901-IIB-P/S-SS-007	**14-06-0664-5-A**	**06/09/14 08:47**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 12:52**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1300	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-008	**14-06-0664-6-A**	**06/09/14 08:48**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 13:12**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	270	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-008	**14-06-0664-6-A**	**06/09/14 08:48**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 13:31**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	5100	510	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
901-IIB-P/S-SS-009	**14-06-0664-7-A**	**06/09/14 08:49**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 13:50**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	740	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

901-IIB-P/S-SS-009	**14-06-0664-7-A**	**06/09/14 08:49**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 15:25**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	9800	2500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-SS-016	**14-06-0664-8-A**	**06/09/14 13:20**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 14:09**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	630	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	60	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

293-IIIA-P/S-SS-017	**14-06-0664-9-A**	**06/09/14 13:25**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 14:28**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	770	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	57	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-264**	**N/A**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 09:41**	**140609L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
901-IIB-P/S-SS-006	**Sample**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 11:55**	**140609S18**
901-IIB-P/S-SS-006	**Matrix Spike**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 14:47**	**140609S18**
901-IIB-P/S-SS-006	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 15:06**	**140609S18**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	1000	16390	1639	16580	1658	50-135	1	0-25	3
Aroclor-1260	3620	1000	2010	0	1996	0	50-135	1	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/09/14
121 Innovation Drive, Suite 200		Work Order:	14-06-0664
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-264	**LCS**	**Solid**	**GC 31**	**06/09/14**	**06/11/14 10:00**	**140609L18**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	78.14	78	50-135	
Aroclor-1260	100.0	93.81	94	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-0664

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8082	EPA 3540C	842	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-0664

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31354

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 6-9-14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-06-0664
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES: EPA 8082

	DATE	TIME	SAMPLE NUMBER	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-9-14	0840	901-IIB-P/S-SS-003	X	4oz glass jar	S			X		1	
2		0842	901-IIB-P/S-SS-004	X		S			X		1	
3		0844	901-IIB-P/S-SS-005	X		S			X		1	
4		0846	901-IIB-P/S-SS-006	X		S			X		1	
5		0847	901-IIB-P/S-SS-007	X		S			X		1	
6		0848	901-IIB-P/S-SS-008	X		S			X		1	
7		0849	901-IIB-P/S-SS-009	X		S			X		1	
8		1320	293-IIIA-P/S-SS-016	X		S			X		1	
9		1325	293-IIIA-P/S-SS-017	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/9/14	1500	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	6/9/14	1500
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	6/9/14	1615	SIGNATURE: Alex Marquez PRINTED NAME: ALEX MARQUEZ COMPANY: ECI	6/9/14	1615
SIGNATURE: Alex Marquez PRINTED NAME: ALEX MARQUEZ COMPANY: ECI	6/9/14	1741	SIGNATURE: Dannyle PRINTED NAME: DANNY LE COMPANY: ECI	6/9/14	1741

TOTAL NUMBER OF CONTAINERS: 9

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-06-0664

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/9/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 846

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 846

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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WORK ORDER NUMBER: 14-06-1523

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/24/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Narrative

Work Order: 14-06-1523 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/19/14. They were assigned to Work Order 14-06-1523.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1523
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/19/14 17:08
		Number of Containers:	6
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-9A	14-06-1523-1	06/19/14 07:15	1	Solid
W-15A	14-06-1523-2	06/19/14 07:28	1	Solid
W-21A	14-06-1523-3	06/19/14 07:47	1	Solid
293-IIIA-P/S-CS-036	14-06-1523-4	06/19/14 11:28	1	Concrete
293-IIIA-P/S-CS-037	14-06-1523-5	06/19/14 11:34	1	Concrete
914-IIB-P/S-CS-001	14-06-1523-6	06/19/14 13:21	1	Concrete

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1523
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/19/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-9A (14-06-1523-1)						
Arsenic	138		7.28	mg/kg	EPA 6010B	EPA 3050B
Arsenic	0.652		0.100	mg/L	EPA 6010B	EPA 1311
Arsenic	9.83		0.150	mg/L	EPA 6010B	T22.11.5. AII
W-15A (14-06-1523-2)						
Arsenic	80.7		7.35	mg/kg	EPA 6010B	EPA 3050B
Lead	333		4.90	mg/kg	EPA 6010B	EPA 3050B
Lead	0.358		0.100	mg/L	EPA 6010B	EPA 1311
Arsenic	7.10		0.150	mg/L	EPA 6010B	T22.11.5. AII
Lead	26.3		0.100	mg/L	EPA 6010B	T22.11.5. AII
W-21A (14-06-1523-3)						
Lead	523		4.88	mg/kg	EPA 6010B	EPA 3050B
Lead	3.20		0.100	mg/L	EPA 6010B	EPA 1311
Lead	32.6		0.100	mg/L	EPA 6010B	T22.11.5. AII
293-IIIA-P/S-CS-036 (14-06-1523-4)						
Aroclor-1248	310		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	55		50	ug/kg	EPA 8082	EPA 3540C
293-IIIA-P/S-CS-037 (14-06-1523-5)						
Aroclor-1248	120		50	ug/kg	EPA 8082	EPA 3540C
914-IIB-P/S-CS-001 (14-06-1523-6)						
Aroclor-1248	1900000		250000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	280000		50000	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-9A	**14-06-1523-1-A**	**06/19/14 07:15**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 15:32**	**140619L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	138	7.28	9.71	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-15A	**14-06-1523-2-A**	**06/19/14 07:28**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 15:34**	**140619L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	80.7	7.35	9.80	
Lead	333	4.90	9.80	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-21A	**14-06-1523-3-A**	**06/19/14 07:47**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 15:35**	**140619L04**

Parameter	Result	RL	DF	Qualifiers
Lead	523	4.88	9.76	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18507**	**N/A**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 21:50**	**140619L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	
Lead	ND	0.500	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-9A	**14-06-1523-1-A**	**06/19/14 07:15**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 16:13**	**140623LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	9.83	0.150	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-15A	**14-06-1523-2-A**	**06/19/14 07:28**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 16:14**	**140623LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	7.10	0.150	1.00	
Lead	26.3	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-21A	**14-06-1523-3-A**	**06/19/14 07:47**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 16:15**	**140623LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	32.6	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-05-006-7314**	**N/A**	**Aqueous**	**ICP 7300**	**06/19/14**	**06/23/14 16:05**	**140623LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.150	1.00	
Lead	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-9A	**14-06-1523-1-A**	**06/19/14 07:15**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 21:39**	**140620LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.652	0.100	1.00	

W-15A	**14-06-1523-2-A**	**06/19/14 07:28**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 21:41**	**140620LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.100	1.00	
Lead	0.358	0.100	1.00	

W-21A	**14-06-1523-3-A**	**06/19/14 07:47**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 21:43**	**140620LA1**

Parameter	Result	RL	DF	Qualifiers
Lead	3.20	0.100	1.00	

Method Blank	**099-14-021-1234**	**N/A**	**Aqueous**	**ICP 7300**	**06/19/14**	**06/20/14 20:32**	**140620LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.100	1.00	
Lead	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
293-IIIA-P/S-CS-036	**14-06-1523-4-A**	**06/19/14 11:28**	**Concrete**	**GC 31**	**06/19/14**	**06/21/14 03:32**	**140619L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	310	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	55	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	135	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

293-IIIA-P/S-CS-037	**14-06-1523-5-A**	**06/19/14 11:34**	**Concrete**	**GC 31**	**06/19/14**	**06/21/14 03:51**	**140619L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	120	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	144	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
914-IIB-P/S-CS-001	**14-06-1523-6-A**	**06/19/14 13:21**	**Concrete**	**GC 31**	**06/19/14**	**06/23/14 10:21**	**140619L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50000	1000	
Aroclor-1221	ND	50000	1000	
Aroclor-1232	ND	50000	1000	
Aroclor-1242	ND	50000	1000	
Aroclor-1254	ND	50000	1000	
Aroclor-1260	280000	50000	1000	
Aroclor-1262	ND	50000	1000	
Aroclor-1268	ND	50000	1000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	1800	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

914-IIB-P/S-CS-001	**14-06-1523-6-A**	**06/19/14 13:21**	**Concrete**	**GC 31**	**06/19/14**	**06/23/14 11:19**	**140619L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1900000	250000	5000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	4800	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-271**	**N/A**	**Solid**	**GC 31**	**06/19/14**	**06/21/14 02:54**	**140619L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-1494-1	**Sample**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 21:53**	**140619S04**
14-06-1494-1	**Matrix Spike**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 21:55**	**140619S04**
14-06-1494-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 21:56**	**140619S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	1.607	25.00	28.86	109	28.56	108	75-125	1	0-20	
Lead	18.72	25.00	50.54	127	45.10	106	75-125	11	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-1142-1	**Sample**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 16:08**	**140623SA1**
14-06-1142-1	**Matrix Spike**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 16:10**	**140623SA1**
14-06-1142-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/19/14**	**06/23/14 16:11**	**140623SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	5.000	4.544	91	4.624	92	75-125	2	0-20	
Lead	ND	5.000	5.136	103	5.206	104	75-125	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-1450-1	**Sample**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 20:39**	**140620SA1**
14-06-1450-1	**Matrix Spike**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 20:41**	**140620SA1**
14-06-1450-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 20:43**	**140620SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	5.000	4.556	91	4.516	90	80-140	1	0-11	
Lead	ND	5.000	5.330	107	5.293	106	84-120	1	0-7	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
914-IIB-P/S-CS-001	**Sample**	**Concrete**	**GC 31**	**06/19/14**	**06/23/14 10:21**	**140619S14**
914-IIB-P/S-CS-001	**Matrix Spike**	**Concrete**	**GC 31**	**06/19/14**	**06/23/14 11:38**	**140619S14**
914-IIB-P/S-CS-001	**Matrix Spike Duplicate**	**Concrete**	**GC 31**	**06/19/14**	**06/23/14 11:57**	**140619S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100000	314000	314	352700	353	50-135	12	0-25	3
Aroclor-1260	281100	100000	216100	0	260400	0	50-135	19	0-25	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18507	**LCS**	**Solid**	**ICP 7300**	**06/19/14**	**06/20/14 21:52**	**140619L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	25.00	25.64	103	80-120	
Lead	25.00	27.32	109	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7314	**LCS**	**Aqueous**	**ICP 7300**	**06/19/14**	**06/23/14 16:07**	**140623LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.000	5.147	103	80-120	
Lead	5.000	5.432	109	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-021-1234	**LCS**	**Aqueous**	**ICP 7300**	**06/19/14**	**06/20/14 20:36**	**140620LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.000	4.997	100	80-120	
Lead	5.000	5.325	107	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/19/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1523
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-271	**LCS**	**Solid**	**GC 31**	**06/19/14**	**06/21/14 03:13**	**140619L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	99.28	99	50-135	
Aroclor-1260	100.0	95.30	95	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-1523

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 6010B	EPA 1311	469	ICP 7300	1
EPA 6010B	T22.11.5. AII	469	ICP 7300	1
EPA 8082	EPA 3540C	842	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-1523

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31216

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-19-14

PAGE 1 OF 1

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR*

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: CalScience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

14-06-1523

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	Arsenic (6010)	Lead (6010)	STLC Arsenic	TCLP Arsenic	STLC Lead	TCLP Lead	EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-19-14	0715	W-9A	X		X	X				4 oz glass jar	S			X		1	
2		0728	W-15A	X	X	X	X	X	X			S			X		1	
3		0747	W-21A		X			X	X			S			X		1	
4		1128	293-IIIA-P/S-CS-036							X		O			X		1	concrete
5		1134	293-IIIA-P/S-CS-037							X		O			X		1	concrete
6		1321	914-IIB-P/S-CS-001							X		O			X		1	concrete

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/19/14	1530	SIGNATURE: PRINTED NAME: Stephen Hurley COMPANY: AMEC	6/19/14	1530
SIGNATURE: PRINTED NAME: Stephen Hurley COMPANY: AMEC	6/19/14	1535	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: ECI	6/19/14	1535
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: ECI	6/19/14	1708	SIGNATURE: PRINTED NAME: Percy Soriano COMPANY: ECI	6/19/14	1708

TOTAL NUMBER OF CONTAINERS: 6

SAMPLING COMMENTS:

* Please complete the STLC and TCLP as soon as possible

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-06-1523

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/19/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: GTS

CUSTODY SEALS INTACT:

☐ Cooler ☐ _____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: GTS

☐ Sample ☐ _____ ☐ No (Not Intact) ☑ Not Present Checked by: JMG

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** JMG

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** SOL

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** JMG

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WORK ORDER NUMBER: 14-06-1920

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 06/30/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-06-1920

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Work Order Narrative

Work Order: 14-06-1920 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/25/14. They were assigned to Work Order 14-06-1920.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/25/14 16:05
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
919-IIIA-P/S-SS-001	14-06-1920-1	06/25/14 10:45	1	Solid
DC-430	14-06-1920-2	06/25/14 10:14	1	Concrete
919-IIIA-P/S-SS-002	14-06-1920-3	06/25/14 10:47	1	Solid
W-26	14-06-1920-4	06/25/14 10:52	1	Solid
W-27	14-06-1920-5	06/25/14 10:54	1	Solid
W-28	14-06-1920-6	06/25/14 10:55	1	Solid
W-29	14-06-1920-7	06/25/14 10:56	1	Solid
W-30	14-06-1920-8	06/25/14 10:57	1	Solid
W-31	14-06-1920-9	06/25/14 10:59	1	Solid
W-32	14-06-1920-10	06/25/14 11:00	1	Solid
W-33	14-06-1920-11	06/25/14 11:03	1	Solid
W-34	14-06-1920-12	06/25/14 11:05	1	Solid
W-35	14-06-1920-13	06/25/14 11:07	1	Solid
W-36	14-06-1920-14	06/25/14 11:09	1	Solid
W-37	14-06-1920-15	06/25/14 11:10	1	Solid
W-38	14-06-1920-16	06/25/14 11:11	1	Solid
W-39	14-06-1920-17	06/25/14 11:13	1	Solid
W-40	14-06-1920-18	06/25/14 11:14	1	Solid
W-41	14-06-1920-19	06/25/14 11:16	1	Solid
W-42	14-06-1920-20	06/25/14 11:18	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/25/14
Attn:	Linda Conlan		Page 1 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
919-IIIA-P/S-SS-001 (14-06-1920-1)						
Aroclor-1248	3100		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	310		50	ug/kg	EPA 8082	EPA 3540C
919-IIIA-P/S-SS-002 (14-06-1920-3)						
Aroclor-1248	3600		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	350		50	ug/kg	EPA 8082	EPA 3540C
W-26 (14-06-1920-4)						
Arsenic	8.51		0.721	mg/kg	EPA 6010B	EPA 3050B
Lead	21.3		0.481	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	4700		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1300		500	ug/kg	EPA 8082	EPA 3540C
W-27 (14-06-1920-5)						
Arsenic	18.3		0.714	mg/kg	EPA 6010B	EPA 3050B
Lead	0.867		0.476	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	960		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	99		50	ug/kg	EPA 8082	EPA 3540C
W-28 (14-06-1920-6)						
Arsenic	62.4		0.735	mg/kg	EPA 6010B	EPA 3050B
Lead	1.92		0.490	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	3400		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	230		50	ug/kg	EPA 8082	EPA 3540C
W-29 (14-06-1920-7)						
Arsenic	60.1		0.765	mg/kg	EPA 6010B	EPA 3050B
Lead	1.16		0.510	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	1500		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	120		50	ug/kg	EPA 8082	EPA 3540C
W-30 (14-06-1920-8)						
Arsenic	6.14		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	2.51		0.493	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	33000		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	5700		2500	ug/kg	EPA 8082	EPA 3540C
W-31 (14-06-1920-9)						
Arsenic	46.4		0.743	mg/kg	EPA 6010B	EPA 3050B
Lead	5.56		0.495	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	6300		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	750		50	ug/kg	EPA 8082	EPA 3540C

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/25/14
Attn:	Linda Conlan		Page 2 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-32 (14-06-1920-10)						
Arsenic	59.4		0.746	mg/kg	EPA 6010B	EPA 3050B
Lead	12.8		0.498	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	12000		1000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1300		1000	ug/kg	EPA 8082	EPA 3540C
W-33 (14-06-1920-11)						
Arsenic	83.6		0.750	mg/kg	EPA 6010B	EPA 3050B
Lead	34.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	84000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	11000		5000	ug/kg	EPA 8082	EPA 3540C
W-34 (14-06-1920-12)						
Arsenic	32.4		0.773	mg/kg	EPA 6010B	EPA 3050B
Lead	13.9		0.515	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	21000		2500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	4100		500	ug/kg	EPA 8082	EPA 3540C
W-35 (14-06-1920-13)						
Arsenic	46.2		0.721	mg/kg	EPA 6010B	EPA 3050B
Lead	5.58		0.481	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	920		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	100		50	ug/kg	EPA 8082	EPA 3540C
W-36 (14-06-1920-14)						
Arsenic	35.5		0.728	mg/kg	EPA 6010B	EPA 3050B
Lead	1.33		0.485	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	480		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	61		50	ug/kg	EPA 8082	EPA 3540C
W-37 (14-06-1920-15)						
Arsenic	8.36		0.754	mg/kg	EPA 6010B	EPA 3050B
Lead	1.45		0.503	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	1700		250	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	210		50	ug/kg	EPA 8082	EPA 3540C
W-38 (14-06-1920-16)						
Arsenic	1.30		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	1.05		0.493	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	480		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	51		50	ug/kg	EPA 8082	EPA 3540C

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/25/14
Attn:	Linda Conlan		Page 3 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-39 (14-06-1920-17)						
Arsenic	20.5		0.773	mg/kg	EPA 6010B	EPA 3050B
Lead	23.3		0.515	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	10000		1000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2600		1000	ug/kg	EPA 8082	EPA 3540C
W-40 (14-06-1920-18)						
Arsenic	5.27		0.743	mg/kg	EPA 6010B	EPA 3050B
Lead	12.7		0.495	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	8600		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	1500		500	ug/kg	EPA 8082	EPA 3540C
W-41 (14-06-1920-19)						
Arsenic	8.45		0.746	mg/kg	EPA 6010B	EPA 3050B
Lead	5.70		0.498	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	300		50	ug/kg	EPA 8082	EPA 3540C
W-42 (14-06-1920-20)						
Lead	1.37		0.500	mg/kg	EPA 6010B	EPA 3050B

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-26	**14-06-1920-4-A**	**06/25/14 10:52**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 14:55**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	8.51	0.721	0.962	
Lead	21.3	0.481	0.962	

W-27	**14-06-1920-5-A**	**06/25/14 10:54**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 14:55**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	18.3	0.714	0.952	
Lead	0.867	0.476	0.952	

W-28	**14-06-1920-6-A**	**06/25/14 10:55**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 14:56**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	62.4	0.735	0.980	
Lead	1.92	0.490	0.980	

W-29	**14-06-1920-7-A**	**06/25/14 10:56**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 14:57**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	60.1	0.765	1.02	
Lead	1.16	0.510	1.02	

W-30	**14-06-1920-8-A**	**06/25/14 10:57**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 14:58**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	6.14	0.739	0.985	
Lead	2.51	0.493	0.985	

W-31	**14-06-1920-9-A**	**06/25/14 10:59**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 14:59**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	46.4	0.743	0.990	
Lead	5.56	0.495	0.990	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-32	**14-06-1920-10-A**	**06/25/14 11:00**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:01**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	59.4	0.746	0.995	
Lead	12.8	0.498	0.995	

W-33	**14-06-1920-11-A**	**06/25/14 11:03**	**Solid**	**ICP 7300**	**06/25/14**	**06/27/14 14:43**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	83.6	0.750	1.00	
Lead	34.4	0.500	1.00	

W-34	**14-06-1920-12-A**	**06/25/14 11:05**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:03**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	32.4	0.773	1.03	
Lead	13.9	0.515	1.03	

W-35	**14-06-1920-13-A**	**06/25/14 11:07**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:04**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	46.2	0.721	0.962	
Lead	5.58	0.481	0.962	

W-36	**14-06-1920-14-A**	**06/25/14 11:09**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:04**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	35.5	0.728	0.971	
Lead	1.33	0.485	0.971	

W-37	**14-06-1920-15-A**	**06/25/14 11:10**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:05**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	8.36	0.754	1.01	
Lead	1.45	0.503	1.01	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-38	**14-06-1920-16-A**	**06/25/14 11:11**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:06**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.30	0.739	0.985	
Lead	1.05	0.493	0.985	

W-39	**14-06-1920-17-A**	**06/25/14 11:13**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:07**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	20.5	0.773	1.03	
Lead	23.3	0.515	1.03	

W-40	**14-06-1920-18-A**	**06/25/14 11:14**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:08**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	5.27	0.743	0.990	
Lead	12.7	0.495	0.990	

W-41	**14-06-1920-19-A**	**06/25/14 11:16**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:09**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	8.45	0.746	0.995	
Lead	5.70	0.498	0.995	

W-42	**14-06-1920-20-A**	**06/25/14 11:18**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 15:11**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	
Lead	1.37	0.500	1.00	

Method Blank	**097-01-002-18535**	**N/A**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 14:51**	**140625L06**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	
Lead	ND	0.500	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
919-IIIA-P/S-SS-001	**14-06-1920-1-A**	**06/25/14 10:45**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 19:50**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	310	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

919-IIIA-P/S-SS-001	**14-06-1920-1-A**	**06/25/14 10:45**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 12:12**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3100	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	105	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DC-430	**14-06-1920-2-A**	**06/25/14 10:14**	**Concrete**	**GC 31**	**06/25/14**	**06/26/14 20:09**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

919-IIIA-P/S-SS-002	**14-06-1920-3-A**	**06/25/14 10:47**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 20:28**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	350	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
919-IIIA-P/S-SS-002	**14-06-1920-3-A**	**06/25/14 10:47**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 12:31**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3600	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

W-26	**14-06-1920-4-A**	**06/25/14 10:52**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 12:50**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	4700	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	1300	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-27	**14-06-1920-5-A**	**06/25/14 10:54**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 21:06**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	960	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	99	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

W-28	**14-06-1920-6-A**	**06/25/14 10:55**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 21:26**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	230	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-28	**14-06-1920-6-A**	**06/25/14 10:55**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 13:10**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3400	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

W-29	**14-06-1920-7-A**	**06/25/14 10:56**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 21:45**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	120	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

W-29	**14-06-1920-7-A**	**06/25/14 10:56**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 13:29**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1500	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	115	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-30	**14-06-1920-8-A**	**06/25/14 10:57**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 13:48**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	2500	50.0	
Aroclor-1221	ND	2500	50.0	
Aroclor-1232	ND	2500	50.0	
Aroclor-1242	ND	2500	50.0	
Aroclor-1248	33000	2500	50.0	
Aroclor-1254	ND	2500	50.0	
Aroclor-1260	5700	2500	50.0	
Aroclor-1262	ND	2500	50.0	
Aroclor-1268	ND	2500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

W-31	**14-06-1920-9-A**	**06/25/14 10:59**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 22:23**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	750	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	108	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-31	**14-06-1920-9-A**	**06/25/14 10:59**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 14:07**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	6300	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-32	**14-06-1920-10-A**	**06/25/14 11:00**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 14:26**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1000	20.0	
Aroclor-1221	ND	1000	20.0	
Aroclor-1232	ND	1000	20.0	
Aroclor-1242	ND	1000	20.0	
Aroclor-1248	12000	1000	20.0	
Aroclor-1254	ND	1000	20.0	
Aroclor-1260	1300	1000	20.0	
Aroclor-1262	ND	1000	20.0	
Aroclor-1268	ND	1000	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	126	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-33	**14-06-1920-11-A**	**06/25/14 11:03**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 14:45**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	5000	100	
Aroclor-1221	ND	5000	100	
Aroclor-1232	ND	5000	100	
Aroclor-1242	ND	5000	100	
Aroclor-1248	84000	5000	100	
Aroclor-1254	ND	5000	100	
Aroclor-1260	11000	5000	100	
Aroclor-1262	ND	5000	100	
Aroclor-1268	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	166	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

W-34	**14-06-1920-12-A**	**06/25/14 11:05**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 15:23**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	4100	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-34	**14-06-1920-12-A**	**06/25/14 11:05**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 15:42**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	21000	2500	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	141	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-35	**14-06-1920-13-A**	**06/25/14 11:07**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 23:39**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	920	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	100	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	113	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-36	**14-06-1920-14-A**	**06/25/14 11:09**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 00:37**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	480	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	61	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

W-37	**14-06-1920-15-A**	**06/25/14 11:10**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 00:56**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	210	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 11 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-37	**14-06-1920-15-A**	**06/25/14 11:10**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 16:02**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	1700	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-38	**14-06-1920-16-A**	**06/25/14 11:11**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 01:15**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	480	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	51	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 12 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39	**14-06-1920-17-A**	**06/25/14 11:13**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 16:40**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	1000	20.0	
Aroclor-1221	ND	1000	20.0	
Aroclor-1232	ND	1000	20.0	
Aroclor-1242	ND	1000	20.0	
Aroclor-1248	10000	1000	20.0	
Aroclor-1254	ND	1000	20.0	
Aroclor-1260	2600	1000	20.0	
Aroclor-1262	ND	1000	20.0	
Aroclor-1268	ND	1000	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

W-40	**14-06-1920-18-A**	**06/25/14 11:14**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 16:59**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	8600	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	1500	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	116	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 13 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-41	**14-06-1920-19-A**	**06/25/14 11:16**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 02:12**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	300	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

W-42	**14-06-1920-20-A**	**06/25/14 11:18**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 02:32**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 14 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-274**	**N/A**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 19:12**	**140625L10**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-33	**Sample**	**Solid**	**ICP 7300**	**06/25/14**	**06/27/14 14:43**	**140625S06**
W-33	**Matrix Spike**	**Solid**	**ICP 7300**	**06/25/14**	**06/27/14 14:41**	**140625S06**
W-33	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/25/14**	**06/27/14 14:42**	**140625S06**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	83.63	25.00	105.6	88	106.0	90	75-125	0	0-20	
Lead	34.44	25.00	57.63	93	57.43	92	75-125	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-27	**Sample**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 21:06**	**140625S10**
W-27	**Matrix Spike**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 02:51**	**140625S10**
W-27	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**06/25/14**	**06/27/14 03:10**	**140625S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	135.3	135	156.6	157	50-135	15	0-25	3
Aroclor-1260	98.96	100.0	126.7	28	169.7	71	50-135	29	0-25	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18535	**LCS**	**Solid**	**ICP 7300**	**06/25/14**	**06/26/14 14:52**	**140625L06**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	25.00	24.34	97	80-120	
Lead	25.00	26.42	106	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-274	**LCS**	**Solid**	**GC 31**	**06/25/14**	**06/26/14 19:31**	**140625L10**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	90.10	90	50-135	
Aroclor-1260	100.0	84.76	85	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-1920

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 8082	EPA 3540C	842	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-1920 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31222

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility
DATE: 6-25-14
PAGE 1 OF 2

PROJECT NUMBER: 0106270030
LABORATORY NAME: Calscience
CLIENT INFORMATION: AMEC
REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan
LABORATORY ADDRESS:

14-06-1920

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier
LABORATORY CONTACT: Steve Nowak
LABORATORY PHONE NUMBER:
GEOTRACKER REQUIRED YES (NO)
SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Lead	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-25-14	1014	919-IIIA-P/S-SS-001	X			4oz glass jar	O			X		1	concrete
2		1045	DC-430	X				S			X		1	
3		1047	919-IIIA-P/S-SS-002	X				S			X		1	
4		1052	W-26	X	X	X		S			X		1	
5		1054	W-27	X	X	X		S			X		1	
6		1055	W-28	X	X	X		S			X		1	
7		1056	W-29	X	X	X		S			X		1	
8		1057	W-30	X	X	X		S			X		1	
9		1059	W-31	X	X	X		S			X		1	
10		1100	W-32	X	X	X		S			X		1	
11		1103	W-33	X	X	X		S			X		1	
12		1105	W-34	X	X	X		S			X		1	
13		1107	W-35	X	X	X		S			X		1	
14		1109	W-36	X	X	X		S			X		1	
15		1110	W-37	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/25/14	1500	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	6/25/14	1500
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	6/25/14	1575	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1575
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1605	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: ECI	6/25/14	1605

TOTAL NUMBER OF CONTAINERS: 15/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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NB 31221

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-25-14 PAGE 2 OF 2

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: 1920

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES: EPA 8082, Lead, Arsenic

	DATE	TIME	SAMPLE NUMBER	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	6-25-14	1111	W-38	4 oz glass jar	S			X		1	
17		1113	W-39		S			X		1	
18		1114	W-40		S			X		1	
19		1116	W-41		S			X		1	
20		1118	W-42		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/25/14	1500	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/25/14	1500
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/25/14	1515	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1515
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1605	SIGNATURE: PRINTED NAME: J. Patel COMPANY: ECI	6/25/14	1605

TOTAL NUMBER OF CONTAINERS: 5/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Stephen Nowak

From: Huang, Stephen [Stephen.Huang@amec.com]
Sent: Wednesday, June 25, 2014 4:31 PM
To: Stephen Nowak; Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Lee, Zhur
Subject: RE: ***COC!!!***

Hello Steve,

Please analyze for PCBs, Arsenic, and Lead.

Thanks,
Stephen

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Wednesday, June 25, 2014 4:28 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: FW: ***COC!!!***
Importance: High

Please see page 2 of the COC- no analysis requested.

Please let me know what is needed for these samples.

Thanks!

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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From: noreply@calscience.com [mailto:noreply@calscience.com]
Sent: Wednesday, June 25, 2014 4:23 PM
To: snowak@calscience.com; ncruise@calscience.com
Subject: ***COC!!!***

PLEASE SEE ATTACHMENT...

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WORK ORDER #: 14-06-1920

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/25/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.6 °C - 0.3 °C (CF) = 3.3 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: SOS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: SOS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: SOS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑ SOS 6/25/14	☑	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☑ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** SOS

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** MG

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** MG

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Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 14-06-1920

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/08/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-06-1920

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Work Order Narrative

Work Order: 14-06-1920 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/25/14. They were assigned to Work Order 14-06-1920.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/25/14 16:05
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-28	14-06-1920-6	06/25/14 10:55	1	Solid
W-29	14-06-1920-7	06/25/14 10:56	1	Solid
W-32	14-06-1920-10	06/25/14 11:00	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/25/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-28 (14-06-1920-6)						
Arsenic	4.22		0.150	mg/L	EPA 6010B	T22.11.5. AII
W-29 (14-06-1920-7)						
Arsenic	3.65		0.150	mg/L	EPA 6010B	T22.11.5. AII
W-32 (14-06-1920-10)						
Arsenic	2.76		0.150	mg/L	EPA 6010B	T22.11.5. AII

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-28	**14-06-1920-6-A**	**06/25/14 10:55**	**Solid**	**ICP 7300**	**07/01/14**	**07/07/14 17:27**	**140703LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	4.22	0.150	1.00	

W-29	**14-06-1920-7-A**	**06/25/14 10:56**	**Solid**	**ICP 7300**	**07/01/14**	**07/07/14 17:29**	**140703LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	3.65	0.150	1.00	

W-32	**14-06-1920-10-A**	**06/25/14 11:00**	**Solid**	**ICP 7300**	**07/01/14**	**07/07/14 17:30**	**140703LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	2.76	0.150	1.00	

Method Blank	**097-05-006-7331**	**N/A**	**Aqueous**	**ICP 7300**	**07/01/14**	**07/03/14 21:36**	**140703LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.150	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0134-1	**Sample**	**Aqueous**	**ICP 7300**	**07/03/14**	**07/03/14 21:40**	**140703SA1**
14-07-0134-1	**Matrix Spike**	**Aqueous**	**ICP 7300**	**07/03/14**	**07/03/14 21:42**	**140703SA1**
14-07-0134-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP 7300**	**07/03/14**	**07/03/14 21:49**	**140703SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	5.000	4.352	87	4.181	84	75-125	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7331	**LCS**	**Aqueous**	**ICP 7300**	**07/01/14**	**07/03/14 21:38**	**140703LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.000	5.110	102	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Glossary of Terms and Qualifiers

Work Order: 14-06-1920 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, July 01, 2014 8:43 AM
To: Stephen Nowak
Subject: Re: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Please run STLC for arsenic on samples W-28, W-29, and W-32. Fastest turnaround again-thanks.

Sent from my iPhone

On Jun 30, 2014, at 2:04 PM, "Stephen Nowak" <StephenNowak@eurofinsUS.com> wrote:

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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NB 31222

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility
DATE: 6-25-14
PAGE 1 OF 2

PROJECT NUMBER: 0106270030
LABORATORY NAME: Calscience
CLIENT INFORMATION: AMEC
REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan
LABORATORY ADDRESS:

14-06-1920

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier
LABORATORY CONTACT: Steve Nowak
LABORATORY PHONE NUMBER:
GEOTRACKER REQUIRED YES (NO)
SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Lead	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-25-14	1014	919-IIIA-P/S-SS-001	X			4oz glass jar	O			X		1	concrete
2		1045	DC-430	X				S			X		1	
3		1047	919-IIIA-P/S-SS-002	X				S			X		1	
4		1052	W-26	X	X	X		S			X		1	
5		1054	W-27	X	X	X		S			X		1	
6		1055	W-28	X	X	X		S			X		1	
7		1056	W-29	X	X	X		S			X		1	
8		1057	W-30	X	X	X		S			X		1	
9		1059	W-31	X	X	X		S			X		1	
10		1100	W-32	X	X	X		S			X		1	
11		1103	W-33	X	X	X		S			X		1	
12		1105	W-34	X	X	X		S			X		1	
13		1107	W-35	X	X	X		S			X		1	
14		1109	W-36	X	X	X		S			X		1	
15		1110	W-37	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/25/14	1500	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: TMSC	6/25/14	1500
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: TMSC	6/25/14	1575	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1575
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1605	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: ECI	6/25/14	1605

TOTAL NUMBER OF CONTAINERS: 15/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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NB 31221

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-25-14 PAGE 2 OF 2

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: 1920

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES: EPA 8082, Lead, Arsenic

	DATE	TIME	SAMPLE NUMBER	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	6-25-14	1111	W-38	4 oz glass jar	S			X		1	
17		1113	W-39		S			X		1	
18		1114	W-40		S			X		1	
19		1116	W-41		S			X		1	
20		1118	W-42		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/25/14	1500	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/25/14	1500
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/25/14	1515	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1515
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1605	SIGNATURE: PRINTED NAME: J. Patel COMPANY: ECI	6/25/14	1605

TOTAL NUMBER OF CONTAINERS: 5/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Stephen Nowak

From: Huang, Stephen [Stephen.Huang@amec.com]
Sent: Wednesday, June 25, 2014 4:31 PM
To: Stephen Nowak; Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Lee, Zhur
Subject: RE: ***COC!!!***

Hello Steve,

Please analyze for PCBs, Arsenic, and Lead.

Thanks,
Stephen

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Wednesday, June 25, 2014 4:28 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: FW: ***COC!!!***
Importance: High

Please see page 2 of the COC- no analysis requested.

Please let me know what is needed for these samples.

Thanks!

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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From: noreply@calscience.com [mailto:noreply@calscience.com]
Sent: Wednesday, June 25, 2014 4:23 PM
To: snowak@calscience.com; ncruise@calscience.com
Subject: ***COC!!!***

PLEASE SEE ATTACHMENT...

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WORK ORDER #: 14-06-1920

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/25/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.6 °C - 0.3 °C (CF) = 3.3 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: SDJ

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: SDJ

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: SDJ

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑ SDJ 6/25/14	☑	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☑ No analysis requested. BZ ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** SDJ

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** SM

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** MC

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Supplemental Report 2

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 14-06-1920

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/11/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-06-1920

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8 Chain-of-Custody/Sample Receipt Form. 11

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Work Order Narrative

Work Order: 14-06-1920 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/25/14. They were assigned to Work Order 14-06-1920.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/25/14 16:05
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-28	14-06-1920-6	06/25/14 10:55	1	Solid
W-32	14-06-1920-10	06/25/14 11:00	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/25/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-28 (14-06-1920-6)						
Arsenic	0.196		0.100	mg/L	EPA 6010B	EPA 1311
W-32 (14-06-1920-10)						
Arsenic	0.230		0.100	mg/L	EPA 6010B	EPA 1311

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-28	**14-06-1920-6-A**	**06/25/14 10:55**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 20:34**	**140710LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.196	0.100	1.00	

W-32	**14-06-1920-10-A**	**06/25/14 11:00**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 20:36**	**140710LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.230	0.100	1.00	

Method Blank	**099-14-021-1247**	**N/A**	**Aqueous**	**ICP 7300**	**07/09/14**	**07/10/14 15:24**	**140710LA1**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.100	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0139-1	**Sample**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 15:37**	**140710SA1**
14-07-0139-1	**Matrix Spike**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 15:39**	**140710SA1**
14-07-0139-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 15:40**	**140710SA1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	5.000	4.233	85	3.312	66	80-140	24	0-11	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	EPA 1311
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-021-1247	**LCS**	**Aqueous**	**ICP 7300**	**07/09/14**	**07/10/14 15:26**	**140710LA1**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.000	4.637	93	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-1920

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 1311	469	ICP 7300	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-1920 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Wednesday, July 09, 2014 8:05 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Steve:
Please add TCLP for Arsenic for samples W-28 and W-32. Please provide quickest turnaround available. Thanks.

Kim

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Tuesday, July 08, 2014 8:57 AM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, July 01, 2014 8:43 AM
To: Stephen Nowak
Subject: Re: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Please run STLC for arsenic on samples W-28, W-29, and W-32. Fastest turnaround again-thanks.

Sent from my iPhone

On Jun 30, 2014, at 2:04 PM, "Stephen Nowak" <StephenNowak@eurofinsUS.com> wrote:

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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<14061920.xls>

<1303745.pdf>

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NB 31222

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility
DATE: 6-25-14
PAGE 1 OF 2

PROJECT NUMBER: 0106270030
LABORATORY NAME: Calscience
CLIENT INFORMATION: AMEC
REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan
LABORATORY ADDRESS:

14-06-1920

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier
LABORATORY CONTACT: Steve Nowak
LABORATORY PHONE NUMBER:
GEOTRACKER REQUIRED YES (NO)
SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Lead	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-25-14	1014	919-IIIA-P/S-SS-001	X			4oz glass jar	O			X		1	concrete
2		1045	DC-430	X				S			X		1	
3		1047	919-IIIA-P/S-SS-002	X				S			X		1	
4		1052	W-26	X	X	X		S			X		1	
5		1054	W-27	X	X	X		S			X		1	
6		1055	W-28	X	X	X		S			X		1	
7		1056	W-29	X	X	X		S			X		1	
8		1057	W-30	X	X	X		S			X		1	
9		1059	W-31	X	X	X		S			X		1	
10		1100	W-32	X	X	X		S			X		1	
11		1103	W-33	X	X	X		S			X		1	
12		1105	W-34	X	X	X		S			X		1	
13		1107	W-35	X	X	X		S			X		1	
14		1109	W-36	X	X	X		S			X		1	
15		1110	W-37	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/25/14	1500	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: TMSC	6/25/14	1500
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: TMSC	6/25/14	1575	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1575
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1605	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: ECI	6/25/14	1605

TOTAL NUMBER OF CONTAINERS: 15/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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NB 31221

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-25-14 PAGE 2 OF 2

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: 1920

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES: EPA 8082, Lead, Arsenic

	DATE	TIME	SAMPLE NUMBER	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	6-25-14	1111	W-38	4 oz glass jar	S			X		1	
17	↓	1113	W-39	↓	S			X		1	
18	↓	1114	W-40	↓	S			X		1	
19	↓	1116	W-41	↓	S			X		1	
20	↓	1118	W-42	↓	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/25/14	1500	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/25/14	1500
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/25/14	1575	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1575
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1605	SIGNATURE: PRINTED NAME: J. Patel COMPANY: ECI	6/25/14	1605

TOTAL NUMBER OF CONTAINERS: 5/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Stephen Nowak

From: Huang, Stephen [Stephen.Huang@amec.com]
Sent: Wednesday, June 25, 2014 4:31 PM
To: Stephen Nowak; Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Lee, Zhur
Subject: RE: ***COC!!!***

Hello Steve,

Please analyze for PCBs, Arsenic, and Lead.

Thanks,
Stephen

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Wednesday, June 25, 2014 4:28 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: FW: ***COC!!!***
Importance: High

Please see page 2 of the COC- no analysis requested.

Please let me know what is needed for these samples.

Thanks!

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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From: noreply@calscience.com [mailto:noreply@calscience.com]
Sent: Wednesday, June 25, 2014 4:23 PM
To: snowak@calscience.com; ncruise@calscience.com
Subject: ***COC!!!***

PLEASE SEE ATTACHMENT...

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WORK ORDER #: 14-06-1920

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/25/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.6 °C - 0.3 °C (CF) = 3.3 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: SDJ

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: SDJ

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: SDJ

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑ SDJ 6/25/14	☑	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☑ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** SDJ

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** MC

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** MC

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Supplemental Report 3

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 14-06-1920

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/14/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

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Work Order Number: 14-06-1920

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Work Order Narrative

Work Order: 14-06-1920 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/25/14. They were assigned to Work Order 14-06-1920.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/25/14 16:05
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-28	14-06-1920-6	06/25/14 10:55	1	Solid
W-32	14-06-1920-10	06/25/14 11:00	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-1920
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/25/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-28 (14-06-1920-6)						
Arsenic	0.789		0.150	mg/L	EPA 6010B	T22.11.5.AII DI
W-32 (14-06-1920-10)						
Arsenic	0.312		0.150	mg/L	EPA 6010B	T22.11.5.AII DI

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	T22.11.5.AII DI
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-28	**14-06-1920-6-A**	**06/25/14 10:55**	**Solid**	**ICP 7300**	**07/09/14**	**07/12/14 15:15**	**140711LA3**

Comment(s): - This sample was prepared with deionized water as the extractant.

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.789	0.150	1.00	

W-32	**14-06-1920-10-A**	**06/25/14 11:00**	**Solid**	**ICP 7300**	**07/09/14**	**07/12/14 15:20**	**140711LA3**

Comment(s): - This sample was prepared with deionized water as the extractant.

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.312	0.150	1.00	

Method Blank	**097-05-006-7341**	**N/A**	**Aqueous**	**ICP 7300**	**07/09/14**	**07/12/14 15:08**	**140711LA3**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.150	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	T22.11.5.AII DI
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-28	**Sample**	**Solid**	**ICP 7300**	**07/09/14**	**07/12/14 15:15**	**140711SA3**
W-28	**Matrix Spike**	**Solid**	**ICP 7300**	**07/09/14**	**07/12/14 15:17**	**140711SA3**
W-28	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**07/09/14**	**07/12/14 15:18**	**140711SA3**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.7888	5.000	5.171	88	5.006	84	75-125	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/25/14
121 Innovation Drive, Suite 200		Work Order:	14-06-1920
Irvine, CA 92617-3094		Preparation:	T22.11.5.AII DI
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7341	**LCS**	**Aqueous**	**ICP 7300**	**07/09/14**	**07/12/14 15:13**	**140711LA3**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.000	5.050	101	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-1920

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	T22.11.5.AII DI	469	ICP 7300	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-1920 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Wednesday, July 09, 2014 2:01 PM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Can we also add WET STLC for Arsenic on the same two samples?

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Wednesday, July 09, 2014 8:49 AM
To: Holland, Kim
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

OK- 48hr TAT, results due Friday.
We'll get this started.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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From: Holland, Kim [mailto:Kim.Holland@amec.com]
Sent: Wednesday, July 09, 2014 8:05 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Steve:
Please add TCLP for Arsenic for samples W-28 and W-32. Please provide quickest turnaround available. Thanks.

Kim

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Tuesday, July 08, 2014 8:57 AM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Report, EDD, and Invoice are attached.

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Wednesday, July 09, 2014 8:05 AM
To: Stephen Nowak
Subject: RE: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Steve:
Please add TCLP for Arsenic for samples W-28 and W-32. Please provide quickest turnaround available. Thanks.

Kim

From: Stephen Nowak [StephenNowak@eurofinsUS.com]
Sent: Tuesday, July 08, 2014 8:57 AM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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Stephen Nowak

From: Holland, Kim [Kim.Holland@amec.com]
Sent: Tuesday, July 01, 2014 8:43 AM
To: Stephen Nowak
Subject: Re: Former Pechiney Cast Plate Facility / 0106270030 / CEL 14-06-1920

Please run STLC for arsenic on samples W-28, W-29, and W-32. Fastest turnaround again-thanks.

Sent from my iPhone

On Jun 30, 2014, at 2:04 PM, "Stephen Nowak" <StephenNowak@eurofinsUS.com> wrote:

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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CHAIN-OF-CUSTODY RECORD

NB 31222

PROJECT NAME: Former Pechiney Cast Plate Facility		DATE: 6-25-14	PAGE 1 OF 2
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-06-1920
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Lead	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-25-14	1014	919-IIIA-P/S-SS-001	X			4oz glass jar	O			X		1	concrete
2		1045	DC-430	X				S			X		1	
3		1047	919-IIIA-P/S-SS-002	X				S			X		1	
4		1052	W-26	X	X	X		S			X		1	
5		1054	W-27	X	X	X		S			X		1	
6		1055	W-28	X	X	X		S			X		1	
7		1056	W-29	X	X	X		S			X		1	
8		1057	W-30	X	X	X		S			X		1	
9		1059	W-31	X	X	X		S			X		1	
10		1100	W-32	X	X	X		S			X		1	
11		1103	W-33	X	X	X		S			X		1	
12		1105	W-34	X	X	X		S			X		1	
13		1107	W-35	X	X	X		S			X		1	
14		1109	W-36	X	X	X		S			X		1	
15		1110	W-37	X	X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/25/14	1500	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	6/25/14	1500
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	6/25/14	1575	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1575
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1605	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: ECI	6/25/14	1605

TOTAL NUMBER OF CONTAINERS: 15/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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NB 31221

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-25-14 PAGE 2 OF 2

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: 1920

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES: EPA 8082, Lead, Arsenic

	DATE	TIME	SAMPLE NUMBER	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	6-25-14	1111	W-38	4 oz glass jar	S			X		1	
17		1113	W-39		S			X		1	
18		1114	W-40		S			X		1	
19		1116	W-41		S			X		1	
20		1118	W-42		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/25/14	1500	SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/25/14	1500
SIGNATURE: PRINTED NAME: Stephen Hung COMPANY: AMEC	6/25/14	1515	SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1515
SIGNATURE: PRINTED NAME: Arthur Young COMPANY: ECI	6/25/14	1605	SIGNATURE: PRINTED NAME: J. Patel COMPANY: ECI	6/25/14	1605

TOTAL NUMBER OF CONTAINERS: 5/20

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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Stephen Nowak

From: Huang, Stephen [Stephen.Huang@amec.com]
Sent: Wednesday, June 25, 2014 4:31 PM
To: Stephen Nowak; Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Lee, Zhur
Subject: RE: ***COC!!!***

Hello Steve,

Please analyze for PCBs, Arsenic, and Lead.

Thanks,
Stephen

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Wednesday, June 25, 2014 4:28 PM
To: Costamagna, Daniel G; Holland, Kim; Conlan, Linda; Huang, Stephen; Lee, Zhur
Subject: FW: ***COC!!!***
Importance: High

Please see page 2 of the COC- no analysis requested.

Please let me know what is needed for these samples.

Thanks!

Stephen Nowak
Project Manager

Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 5230

Email: StephenNowak@EurofinsUS.com
Website: www.calscience.com

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From: noreply@calscience.com [mailto:noreply@calscience.com]
Sent: Wednesday, June 25, 2014 4:23 PM
To: snowak@calscience.com; ncruise@calscience.com
Subject: ***COC!!!***

PLEASE SEE ATTACHMENT...

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WORK ORDER #: 14-06-1920

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/25/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.6 °C - 0.3 °C (CF) = 3.3 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: SDS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: SDS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: SDS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑ SDS 6/25/14	☑	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☑ No analysis requested. BZ ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** SDS

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** MG

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** MG

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WORK ORDER NUMBER: 14-06-2046

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/01/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-06-2046

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Work Order Narrative

Work Order: 14-06-2046 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/26/14. They were assigned to Work Order 14-06-2046.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-2046
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/26/14 17:50
		Number of Containers:	16
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-47	14-06-2046-1	06/26/14 12:53	1	Solid
W-48	14-06-2046-2	06/26/14 12:55	1	Solid
W-49	14-06-2046-3	06/26/14 12:56	1	Solid
W-50	14-06-2046-4	06/26/14 12:57	1	Solid
W-51	14-06-2046-5	06/26/14 12:58	1	Solid
W-52	14-06-2046-6	06/26/14 13:00	1	Solid
#1197	14-06-2046-7	06/26/14 13:37	1	Solid
#1198	14-06-2046-8	06/26/14 13:39	1	Solid
#1199	14-06-2046-9	06/26/14 13:40	1	Solid
#1200	14-06-2046-10	06/26/14 13:42	1	Solid
#1201	14-06-2046-11	06/26/14 13:43	1	Solid
#1202	14-06-2046-12	06/26/14 13:44	1	Solid
#1203	14-06-2046-13	06/26/14 13:46	1	Solid
#1204	14-06-2046-14	06/26/14 13:48	1	Solid
#1205	14-06-2046-15	06/26/14 13:49	1	Solid
#1206	14-06-2046-16	06/26/14 13:50	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-2046
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/26/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-47 (14-06-2046-1)						
Arsenic	10.4		0.746	mg/kg	EPA 6010B	EPA 3050B
Lead	39.5		0.498	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	1500		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	2700		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1268	5000		500	ug/kg	EPA 8082	EPA 3540C
W-48 (14-06-2046-2)						
Lead	2.05		0.490	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	400		50	ug/kg	EPA 8082	EPA 3540C
W-49 (14-06-2046-3)						
Lead	2.61		0.495	mg/kg	EPA 6010B	EPA 3050B
W-50 (14-06-2046-4)						
Lead	3.06		0.500	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	90		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	220		50	ug/kg	EPA 8082	EPA 3540C
W-51 (14-06-2046-5)						
Arsenic	63.2		0.739	mg/kg	EPA 6010B	EPA 3050B
Lead	1.99		0.493	mg/kg	EPA 6010B	EPA 3050B
W-52 (14-06-2046-6)						
Arsenic	1.34		0.743	mg/kg	EPA 6010B	EPA 3050B
Lead	9.49		0.495	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	280		50	ug/kg	EPA 8082	EPA 3540C
#1202 (14-06-2046-12)						
Aroclor-1248	290		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-47	**14-06-2046-1-A**	**06/26/14 12:53**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 19:18**	**140626L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	10.4	0.746	0.995	
Lead	39.5	0.498	0.995	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-48	**14-06-2046-2-A**	**06/26/14 12:55**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 19:19**	**140626L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.735	0.980	
Lead	2.05	0.490	0.980	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-49	**14-06-2046-3-A**	**06/26/14 12:56**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 19:20**	**140626L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.743	0.990	
Lead	2.61	0.495	0.990	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-50	**14-06-2046-4-A**	**06/26/14 12:57**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 19:21**	**140626L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	
Lead	3.06	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-51	**14-06-2046-5-A**	**06/26/14 12:58**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 19:23**	**140626L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	63.2	0.739	0.985	
Lead	1.99	0.493	0.985	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-52	**14-06-2046-6-A**	**06/26/14 13:00**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 19:24**	**140626L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.34	0.743	0.990	
Lead	9.49	0.495	0.990	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18539**	**N/A**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 18:47**	**140626L05**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	
Lead	ND	0.500	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-47	**14-06-2046-1-A**	**06/26/14 12:53**	**Solid**	**GC 31**	**06/26/14**	**06/30/14 15:55**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	1500	500	10.0	
Aroclor-1254	2700	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	5000	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	444	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	112	50-130	

W-48	**14-06-2046-2-A**	**06/26/14 12:55**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 14:22**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	400	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	131	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-49	**14-06-2046-3-A**	**06/26/14 12:56**	**Solid**	**GC 31**	**06/26/14**	**06/30/14 16:14**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	127	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	116	50-130	

W-50	**14-06-2046-4-A**	**06/26/14 12:57**	**Solid**	**GC 31**	**06/26/14**	**06/30/14 16:33**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	90	50	1.00	
Aroclor-1254	220	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-51	**14-06-2046-5-A**	**06/26/14 12:58**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 15:19**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

W-52	**14-06-2046-6-A**	**06/26/14 13:00**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 15:39**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	280	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1197	**14-06-2046-7-A**	**06/26/14 13:37**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 15:58**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

#1198	**14-06-2046-8-A**	**06/26/14 13:39**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 16:17**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	129	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	101	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1199	**14-06-2046-9-A**	**06/26/14 13:40**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 16:36**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

#1200	**14-06-2046-10-A**	**06/26/14 13:42**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 16:55**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1201	**14-06-2046-11-A**	**06/26/14 13:43**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 17:14**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

#1202	**14-06-2046-12-A**	**06/26/14 13:44**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 17:33**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	290	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	127	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1203	**14-06-2046-13-A**	**06/26/14 13:46**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 17:53**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	130	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

#1204	**14-06-2046-14-A**	**06/26/14 13:48**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 18:12**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1205	**14-06-2046-15-A**	**06/26/14 13:49**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 18:31**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#1206	**14-06-2046-16-A**	**06/26/14 13:50**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 18:50**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-276**	**N/A**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 05:07**	**140626L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-1701-12	**Sample**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 19:02**	**140626S05**
14-06-1701-12	**Matrix Spike**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 18:52**	**140626S05**
14-06-1701-12	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 18:53**	**140626S05**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	1.641	25.00	27.46	103	27.80	105	75-125	1	0-20	
Lead	0.6744	25.00	26.03	101	26.08	102	75-125	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1197	**Sample**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 15:58**	**140626S15**
#1197	**Matrix Spike**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 06:24**	**140626S15**
#1197	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 07:02**	**140626S15**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	127.7	128	106.0	106	50-135	19	0-25	
Aroclor-1260	ND	100.0	305.3	305	225.6	226	50-135	30	0-25	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18539	**LCS**	**Solid**	**ICP 7300**	**06/26/14**	**06/27/14 18:51**	**140626L05**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	25.00	24.41	98	80-120	
Lead	25.00	26.32	105	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/26/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2046
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-276	**LCS**	**Solid**	**GC 31**	**06/26/14**	**06/28/14 05:26**	**140626L15**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	78.74	79	50-135	
Aroclor-1260	100.0	83.08	83	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-2046

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 8082	EPA 3540C	842	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-2046 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-26-14

PAGE 1 OF 2

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: 14-06-2046

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Lead	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-26-14	1253	W-47	X	X	X	4 oz glass jar	S			X		1	
2		1255	W-48	X	X	X		S			X		1	
3		1256	W-49	X	X	X		S			X		1	
4		1257	W-50	X	X	X		S			X		1	
5		1258	W-51	X	X	X		S			X		1	
6		1300	W-52	X	X	X		S			X		1	
7		1337	#1197	X				S			X		1	
8		1339	#1198	X				S			X		1	
9		1340	#1199	X				S			X		1	
10		1342	#1200	X				S			X		1	
11		1343	#1201	X				S			X		1	
12		1344	#1202	X				S			X		1	
13		1346	#1203	X				S			X		1	
14		1348	#1204	X				S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	6/26/14	1510	SIGNATURE: Rudy W PRINTED NAME: RUDY HIGA COMPANY: ECL	6/26/14	1510
SIGNATURE: Rudy W PRINTED NAME: RUDY HIGA COMPANY: ECL	6/26/14	1750	SIGNATURE: PRINTED NAME: Paul Cicio COMPANY: CEI	6/26/14 6/26/14	1750
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 14/16

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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CHAIN-OF-CUSTODY RECORD

NB 31227

PROJECT NAME: Former Pechiney Cast Plate Facility		DATE: 6-26-14	PAGE 2 OF 2
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS: 2046
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly H Chominsky

	DATE	TIME	SAMPLE NUMBER	ANALYSES: EPA 8082	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
15	6-26-14	1349	#1205	X	4oz glass jar	S			X		1	
16	6-26-14	1350	#1206	X	4oz glass jar	S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	6/26/14	1510	SIGNATURE: PRINTED NAME: RUDY MIGA COMPANY: ECI	6/26/14	1510
SIGNATURE: Rudy M PRINTED NAME: RUDY MIGA COMPANY: ECI	6/26/14	1750	SIGNATURE: PRINTED NAME: Yau Liao COMPANY: ECI	6/26/14	1750
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 2/16

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-06-2646

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/26/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 762

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 762

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 776

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 776

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WORK ORDER NUMBER: 14-06-2211

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/07/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

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Work Order Narrative

Work Order: 14-06-2211 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/30/14. They were assigned to Work Order 14-06-2211.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-2211
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	06/30/14 16:52
		Number of Containers:	15
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1207	14-06-2211-1	06/30/14 12:57	1	Solid
#1208	14-06-2211-2	06/30/14 12:59	1	Solid
#1209	14-06-2211-3	06/30/14 13:01	1	Solid
#1210	14-06-2211-4	06/30/14 13:02	1	Solid
#1211	14-06-2211-5	06/30/14 13:04	1	Solid
#1212	14-06-2211-6	06/30/14 13:34	1	Solid
#1213	14-06-2211-7	06/30/14 13:34	1	Solid
#1214	14-06-2211-8	06/30/14 13:35	1	Solid
#1215	14-06-2211-9	06/30/14 13:36	1	Solid
#1216	14-06-2211-10	06/30/14 13:37	1	Solid
#1217	14-06-2211-11	06/30/14 13:38	1	Solid
#1218	14-06-2211-12	06/30/14 13:41	1	Solid
#1219	14-06-2211-13	06/30/14 13:42	1	Solid
#1220	14-06-2211-14	06/30/14 13:43	1	Solid
#1221	14-06-2211-15	06/30/14 13:50	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-06-2211
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	06/30/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1209 (14-06-2211-3)						
Aroclor-1248	62		50	ug/kg	EPA 8082	EPA 3540C
#1210 (14-06-2211-4)						
Aroclor-1248	260		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	230		50	ug/kg	EPA 8082	EPA 3540C
#1214 (14-06-2211-8)						
Arsenic	1.36		0.754	mg/kg	EPA 6010B	EPA 3050B
#1217 (14-06-2211-11)						
Arsenic	39.6		0.743	mg/kg	EPA 6010B	EPA 3050B
#1218 (14-06-2211-12)						
Arsenic	3.90		0.754	mg/kg	EPA 6010B	EPA 3050B
#1220 (14-06-2211-14)						
Arsenic	0.896		0.739	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1212	**14-06-2211-6-A**	**06/30/14 13:34**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:51**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.739	0.985	

#1213	**14-06-2211-7-A**	**06/30/14 13:34**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:51**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.758	1.01	

#1214	**14-06-2211-8-A**	**06/30/14 13:35**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:52**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.36	0.754	1.01	

#1215	**14-06-2211-9-A**	**06/30/14 13:36**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:53**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.746	0.995	

#1216	**14-06-2211-10-A**	**06/30/14 13:37**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:54**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.735	0.980	

#1217	**14-06-2211-11-A**	**06/30/14 13:38**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:55**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	39.6	0.743	0.990	

#1218	**14-06-2211-12-A**	**06/30/14 13:41**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:56**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	3.90	0.754	1.01	

#1219	**14-06-2211-13-A**	**06/30/14 13:42**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:58**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.743	0.990	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1220	**14-06-2211-14-A**	**06/30/14 13:43**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 20:59**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.896	0.739	0.985	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1221	**14-06-2211-15-A**	**06/30/14 13:50**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 21:00**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.758	1.01	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18558**	**N/A**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 14:14**	**140630L04**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
		Units:	mg/L
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1221	**14-06-2211-15-A**	**06/30/14 13:50**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 17:24**	**140702LA2**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.150	1.00	

Method Blank	**097-05-006-7328**	**N/A**	**Aqueous**	**ICP 7300**	**06/30/14**	**07/03/14 17:13**	**140702LA2**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.150	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1207	**14-06-2211-1-A**	**06/30/14 12:57**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 04:31**	**140630L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	119	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

#1208	**14-06-2211-2-A**	**06/30/14 12:59**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 04:50**	**140630L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1209	**14-06-2211-3-A**	**06/30/14 13:01**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 05:09**	**140630L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	62	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	125	60-125	
2,4,5,6-Tetrachloro-m-Xylene	100	50-130	

#1210	**14-06-2211-4-A**	**06/30/14 13:02**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 05:29**	**140630L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	260	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	230	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1211	**14-06-2211-5-A**	**06/30/14 13:04**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 05:48**	**140630L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

Method Blank	**099-02-003-277**	**N/A**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 03:53**	**140630L15**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	93	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-1942-24	**Sample**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 19:15**	**140630S04**
14-06-1942-24	**Matrix Spike**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 18:28**	**140630S04**
14-06-1942-24	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 18:29**	**140630S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	3.050	25.00	27.59	98	28.39	101	75-125	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0040-1	**Sample**	**Aqueous**	**ICP 7300**	**07/02/14**	**07/03/14 17:18**	**140702LA2**
14-07-0040-1	**Matrix Spike**	**Aqueous**	**ICP 7300**	**07/02/14**	**07/03/14 17:20**	**140702LA2**
14-07-0040-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP 7300**	**07/02/14**	**07/03/14 17:22**	**140702LA2**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	5.000	4.081	82	4.365	87	75-125	7	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1207	**Sample**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 04:31**	**140630S15**
#1207	**Matrix Spike**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 06:45**	**140630S15**
#1207	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 07:04**	**140630S15**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	76.98	77	86.62	87	50-135	12	0-25	
Aroclor-1260	ND	100.0	87.88	88	94.89	95	50-135	8	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18558	**LCS**	**Solid**	**ICP 7300**	**06/30/14**	**07/03/14 14:19**	**140630L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	25.00	24.05	96	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	T22.11.5. AII
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-05-006-7328	**LCS**	**Aqueous**	**ICP 7300**	**06/30/14**	**07/03/14 17:15**	**140702LA2**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.000	4.971	99	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	06/30/14
121 Innovation Drive, Suite 200		Work Order:	14-06-2211
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-277	**LCS**	**Solid**	**GC 31**	**06/30/14**	**07/02/14 04:12**	**140630L15**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	81.30	81	50-135	
Aroclor-1260	100.0	88.43	88	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-06-2211

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 6010B	T22.11.5. AII	469	ICP 7300	1
EPA 8082	EPA 3540C	842	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-06-2211

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31643

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 6-30-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

14-06-2211

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

GEOTRACKER REQUIRED YES NO

LABORATORY PHONE NUMBER:

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Arsenic	STLC Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	6-30-14	1257	#1207	X			4 oz glass jar	S			X		1	
2		1259	#1208	X				S			X		1	
3		1301	#1209	X				S			X		1	
4		1302	#1210	X				S			X		1	
5		1304	#1211	X				S			X		1	
6		1334	#1212		X			S			X		1	
7		1334	#1213		X			S			X		1	
8		1335	#1214		X			S			X		1	
9		1336	#1215		X			S			X		1	
10		1337	#1216		X			S			X		1	
11		1338	#1217		X			S			X		1	
12		1341	#1218		X			S			X		1	
13		1342	#1219		X			S			X		1	
14		1343	#1220		X			S			X		1	
15		1350	#1221		X	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	6/30/14	1400	SIGNATURE: PRINTED NAME: Stephen King COMPANY: AMEC	6/30/14	1400
SIGNATURE: PRINTED NAME: Stephen King COMPANY: AMEC	6/30/14	1541	SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: ECI	6/30/14	1541
SIGNATURE: Alex Marquez PRINTED NAME: Alex Marquez COMPANY: ECI	6/30/14	1652	SIGNATURE: PRINTED NAME: J. Patel COMPANY: ECI	6/30/14	1652

TOTAL NUMBER OF CONTAINERS: 15

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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WORK ORDER #: 14-06-2211

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/30/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 804

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 804

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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WORK ORDER NUMBER: 14-07-0084

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/07/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-07-0084

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Work Order Narrative

Work Order: 14-07-0084 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/01/14. They were assigned to Work Order 14-07-0084.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0084
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	07/01/14 16:50
		Number of Containers:	8
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-53	14-07-0084-1	07/01/14 12:46	1	Solid
W-54	14-07-0084-2	07/01/14 12:54	1	Solid
#1222	14-07-0084-3	07/01/14 12:58	1	Solid
#1223	14-07-0084-4	07/01/14 12:59	1	Solid
#1224	14-07-0084-5	07/01/14 13:01	1	Solid
#1225	14-07-0084-6	07/01/14 13:00	1	Solid
#1226	14-07-0084-7	07/01/14 13:03	1	Solid
#1227	14-07-0084-8	07/01/14 13:02	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0084
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/01/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
W-54 (14-07-0084-2)						
Arsenic	14.0		0.758	mg/kg	EPA 6010B	EPA 3050B
#1227 (14-07-0084-8)						
Aroclor-1248	97		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1254	190		50	ug/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-53	**14-07-0084-1-A**	**07/01/14 12:46**	**Solid**	**ICP 7300**	**07/01/14**	**07/03/14 23:38**	**140701L01**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.735	0.980	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-54	**14-07-0084-2-A**	**07/01/14 12:54**	**Solid**	**ICP 7300**	**07/01/14**	**07/03/14 23:39**	**140701L01**

Parameter	Result	RL	DF	Qualifiers
Arsenic	14.0	0.758	1.01	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18545**	**N/A**	**Solid**	**ICP 7300**	**07/01/14**	**07/02/14 17:58**	**140701L01**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-53	**14-07-0084-1-A**	**07/01/14 12:46**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 06:57**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	114	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

W-54	**14-07-0084-2-A**	**07/01/14 12:54**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 07:16**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1222	**14-07-0084-3-A**	**07/01/14 12:58**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 07:35**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	124	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

#1223	**14-07-0084-4-A**	**07/01/14 12:59**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 07:54**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	85	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1224	**14-07-0084-5-A**	**07/01/14 13:01**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 08:14**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

#1225	**14-07-0084-6-A**	**07/01/14 13:00**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 08:33**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	120	60-125	
2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1226	**14-07-0084-7-A**	**07/01/14 13:03**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 08:52**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

#1227	**14-07-0084-8-A**	**07/01/14 13:02**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 09:11**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	97	50	1.00	
Aroclor-1254	190	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-278**	**N/A**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 06:00**	**140701L14**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	118	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-2221-8	**Sample**	**Solid**	**ICP 7300**	**07/01/14**	**07/02/14 18:01**	**140701S01**
14-06-2221-8	**Matrix Spike**	**Solid**	**ICP 7300**	**07/01/14**	**07/02/14 18:02**	**140701S01**
14-06-2221-8	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**07/01/14**	**07/02/14 18:03**	**140701S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	25.00	23.99	96	24.27	97	75-125	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1222	**Sample**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 07:35**	**140701S14**
#1222	**Matrix Spike**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 09:30**	**140701S14**
#1222	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 09:49**	**140701S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	72.51	73	73.18	73	50-135	1	0-25	
Aroclor-1260	ND	100.0	88.76	89	90.61	91	50-135	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18545	**LCS**	**Solid**	**ICP 7300**	**07/01/14**	**07/02/14 18:00**	**140701L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	25.00	23.82	95	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/01/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0084
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-278	**LCS**	**Solid**	**GC 31**	**07/01/14**	**07/03/14 06:19**	**140701L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	75.76	76	50-135	
Aroclor-1260	100.0	90.60	91	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-0084

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 8082	EPA 3540C	842	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-0084

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31644

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 7-1-14 / PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: CalScience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-07-0084
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO

SAMPLERS (SIGNATURE): Kimberly H Chominsky

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7-1-14	1246	W-53	X	X	4 oz glass jar	S			X		1	
2		1254	W-54	X	X		S			X		1	
3		1258	#1222	X			S			X		1	
4		1259	#1223	X			S			X		1	
5		1301	#1224	X			S			X		1	
6		1300	#1225	X			S			X		1	
7		1303	#1226	X			S			X		1	
8		1302	#1227	X			S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly H Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	7/1/14	1415	SIGNATURE: PRINTED NAME: COMPANY: AMEC	7/1/14	1415
SIGNATURE: PRINTED NAME: COMPANY: AMEC	7/1/14	1533	SIGNATURE: PRINTED NAME: RUDY MIGA COMPANY: ECI	7/1/14	1533
SIGNATURE: PRINTED NAME: RUDY MIGA COMPANY: ECI	7/1/14	1650	SIGNATURE: PRINTED NAME: J. PATEL COMPANY: ECI	7/1/14	1650

TOTAL NUMBER OF CONTAINERS: 8

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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WORK ORDER #: 14-07-0084

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/1/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.3 °C - 0.3 °C (CF) = 2.0 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 676

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 676

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 828

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 828

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 403

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 403

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WORK ORDER NUMBER: 14-07-0372

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/09/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-07-0372

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5.1 MS/MSD. 8
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8 Chain-of-Custody/Sample Receipt Form. 12

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Work Order Narrative

Work Order: 14-07-0372 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/07/14. They were assigned to Work Order 14-07-0372.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0372
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	07/07/14 18:00
		Number of Containers:	6
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
924-IIB-P/S-CS-002	14-07-0372-1	07/07/14 08:20	1	Solid
924-IIB-P/S-CS-003	14-07-0372-2	07/07/14 08:30	1	Solid
#1242	14-07-0372-3	07/07/14 10:45	1	Solid
#1243	14-07-0372-4	07/07/14 11:38	1	Solid
#1244	14-07-0372-5	07/07/14 15:35	1	Solid
#1245	14-07-0372-6	07/07/14 15:40	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0372
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/07/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1243 (14-07-0372-4)						
C9-C10	68		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	550		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	480		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	82		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	60		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	54		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	36		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	24		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	27		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	30		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	26		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	34		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	22		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1500		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1243	**14-07-0372-4-A**	**07/07/14 11:38**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 09:52**	**140707B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	68	4.9	1.00	
C11-C12	550	4.9	1.00	
C13-C14	480	4.9	1.00	
C15-C16	82	4.9	1.00	
C17-C18	60	4.9	1.00	
C19-C20	54	4.9	1.00	
C21-C22	36	4.9	1.00	
C23-C24	24	4.9	1.00	
C25-C28	27	4.9	1.00	
C29-C32	30	4.9	1.00	
C33-C36	26	4.9	1.00	
C37-C40	34	4.9	1.00	
C41-C44	22	4.9	1.00	
C6-C44 Total	1500	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-990**	**N/A**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 04:38**	**140707B13**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0360-52	**Sample**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 09:16**	**170707S13**
14-07-0360-52	**Matrix Spike**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 05:13**	**170707S13**
14-07-0360-52	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 05:30**	**170707S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	392.5	98	379.6	95	64-130	3	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-990	**LCS**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 04:56**	**140707B13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	420.5	105	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-0372

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 46	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-0372

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31651

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 7-7-14 PAGE 1 OF 1
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-07-0372
TURNAROUND TIME: 48 HR *			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7-7-14	0820	924-IIB-P/S-CS-002	X			4 oz glass jar	O			X		1	concrete
2		0830	924-IIB-P/S-CS-003	X				O			X		1	concrete
3		1045	#1242	X				S			X		1	
4		1138	#1243	X	X			S			X		1	
5		1535	#1244			X		S			X		1	
6		1540	#1245			X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	7/7/14	1300	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	7/7/14	1300
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	7/7/14	1550	SIGNATURE: Alex Nagy PRINTED NAME: DCBX Manager COMPANY: ECI	7/7/14	1550
SIGNATURE: Alex Nagy PRINTED NAME: DCBX Manager COMPANY: ECI	7/7/14	1800	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: ECI	7/7/14	18:00

TOTAL NUMBER OF CONTAINERS: 6

SAMPLING COMMENTS:

* For 8015 analysis, please report in 24 hours.

* For Arsenic analysis, please report in 24 hrs.

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-07-0372

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/7/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: SM

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
* ☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels. ☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time ☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** SM

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

* (5-6) Collection date on label, 7/7/14, 836

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Supplemental Report 1

WORK ORDER NUMBER: 14-07-0372

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/09/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-07-0372

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Work Order Narrative

Work Order: 14-07-0372 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/07/14. They were assigned to Work Order 14-07-0372.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0372
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	07/07/14 18:00
		Number of Containers:	6
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
924-IIB-P/S-CS-002	14-07-0372-1	07/07/14 08:20	1	Solid
924-IIB-P/S-CS-003	14-07-0372-2	07/07/14 08:30	1	Solid
#1242	14-07-0372-3	07/07/14 10:45	1	Solid
#1243	14-07-0372-4	07/07/14 11:38	1	Solid
#1244	14-07-0372-5	07/07/14 15:35	1	Solid
#1245	14-07-0372-6	07/07/14 15:40	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0372
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/07/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
924-IIB-P/S-CS-002 (14-07-0372-1)						
Aroclor-1248	4300000		500000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	300000		25000	ug/kg	EPA 8082	EPA 3540C
924-IIB-P/S-CS-003 (14-07-0372-2)						
Aroclor-1248	4500		500	ug/kg	EPA 8082	EPA 3540C
#1243 (14-07-0372-4)						
C9-C10	68		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	550		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	480		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	82		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	60		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	54		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	36		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	24		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	27		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	30		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	26		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	34		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	22		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1500		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	240		50	ug/kg	EPA 8082	EPA 3540C
#1244 (14-07-0372-5)						
Arsenic	1.12		0.761	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1243	**14-07-0372-4-A**	**07/07/14 11:38**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 09:52**	**140707B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	68	4.9	1.00	
C11-C12	550	4.9	1.00	
C13-C14	480	4.9	1.00	
C15-C16	82	4.9	1.00	
C17-C18	60	4.9	1.00	
C19-C20	54	4.9	1.00	
C21-C22	36	4.9	1.00	
C23-C24	24	4.9	1.00	
C25-C28	27	4.9	1.00	
C29-C32	30	4.9	1.00	
C33-C36	26	4.9	1.00	
C37-C40	34	4.9	1.00	
C41-C44	22	4.9	1.00	
C6-C44 Total	1500	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-990**	**N/A**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 04:38**	**140707B13**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1244	**14-07-0372-5-A**	**07/07/14 15:35**	**Solid**	**ICP 7300**	**07/07/14**	**07/08/14 19:11**	**140707L02**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.12	0.761	1.02	

#1245	**14-07-0372-6-A**	**07/07/14 15:40**	**Solid**	**ICP 7300**	**07/07/14**	**07/08/14 19:12**	**140707L02**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.725	0.966	

Method Blank	**097-01-002-18574**	**N/A**	**Solid**	**ICP 7300**	**07/07/14**	**07/08/14 18:40**	**140707L02**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
924-IIB-P/S-CS-002	**14-07-0372-1-A**	**07/07/14 08:20**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 14:35**	**140707L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	25000	500	
Aroclor-1221	ND	25000	500	
Aroclor-1232	ND	25000	500	
Aroclor-1242	ND	25000	500	
Aroclor-1254	ND	25000	500	
Aroclor-1260	300000	25000	500	
Aroclor-1262	ND	25000	500	
Aroclor-1268	ND	25000	500	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	315	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	1060	50-130	1,2,7

924-IIB-P/S-CS-002	**14-07-0372-1-A**	**07/07/14 08:20**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 15:29**	**140707L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	4300000	500000	10000	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	3500	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	0	50-130	1,2,6

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
924-IIB-P/S-CS-003	**14-07-0372-2-A**	**07/07/14 08:30**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 13:59**	**140707L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1248	4500	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	ND	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	60-125	
2,4,5,6-Tetrachloro-m-Xylene	89	50-130	

#1242	**14-07-0372-3-A**	**07/07/14 10:45**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 14:17**	**140707L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	128	60-125	2,7
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1243	**14-07-0372-4-A**	**07/07/14 11:38**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 11:55**	**140707L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	240	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	84	50-130	

Method Blank	**099-02-003-281**	**N/A**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 10:08**	**140707L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0360-52	**Sample**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 09:16**	**170707S13**
14-07-0360-52	**Matrix Spike**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 05:13**	**170707S13**
14-07-0360-52	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 05:30**	**170707S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	392.5	98	379.6	95	64-130	3	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0171-2	**Sample**	**Solid**	**ICP 7300**	**07/07/14**	**07/08/14 18:57**	**140707S02**
14-07-0171-2	**Matrix Spike**	**Solid**	**ICP 7300**	**07/07/14**	**07/08/14 18:58**	**140707S02**
14-07-0171-2	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**07/07/14**	**07/08/14 19:03**	**140707S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	25.00	24.46	98	23.92	96	75-125	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1242	**Sample**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 14:17**	**140707S09**
#1242	**Matrix Spike**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 12:48**	**140707S09**
#1242	**Matrix Spike Duplicate**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 13:06**	**140707S09**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	88.92	89	89.22	89	50-135	0	0-25	
Aroclor-1260	ND	100.0	90.54	91	93.79	94	50-135	4	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-990	**LCS**	**Solid**	**GC 46**	**07/07/14**	**07/08/14 04:56**	**140707B13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	420.5	105	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18574	**LCS**	**Solid**	**ICP 7300**	**07/07/14**	**07/08/14 18:47**	**140707L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	25.00	24.24	97	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	07/07/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0372
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-02-003-281	**LCS**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 10:25**	**140707L09**
099-02-003-281	**LCSD**	**Solid**	**GC 66**	**07/07/14**	**07/09/14 10:43**	**140707L09**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	100.0	87.12	87	80.94	81	50-135	7	0-20	
Aroclor-1260	100.0	95.53	96	96.08	96	60-130	1	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-0372

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	842	GC 66	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-0372

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31651

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 7-7-14 PAGE 1 OF 1
PROJECT NUMBER: 01062700030	LABORATORY NAME: Calscience	CLIENT INFORMATION: AMEC	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		14-07-0372
TURNAROUND TIME: 48 HR *			
SAMPLE SHIPMENT METHOD: lab courier	LABORATORY CONTACT: Steve Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Chominsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	EPA 8015	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7-7-14	0820	924-IIB-P/S-CS-002	X			4 oz glass jar	O			X		1	concrete
2		0830	924-IIB-P/S-CS-003	X				O			X		1	concrete
3		1045	#1242	X				S			X		1	
4		1138	#1243	X	X			S			X		1	
5		1535	#1244			X		S			X		1	
6		1540	#1245			X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly A Chominsky PRINTED NAME: Kimberly A Chominsky COMPANY: AMEC	7/7/14	1300	SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	7/7/14	1300
SIGNATURE: PRINTED NAME: Stephen Huang COMPANY: AMEC	7/7/14	1550	SIGNATURE: Alex Nagy PRINTED NAME: DCBX Manager COMPANY: ECI	7/7/14	1550
SIGNATURE: Alex Nagy PRINTED NAME: DCBX Manager COMPANY: ECI	7/7/14	1800	SIGNATURE: Danny Le PRINTED NAME: DANNY LE COMPANY: ECI	7/7/14	18:00

TOTAL NUMBER OF CONTAINERS: 6

SAMPLING COMMENTS:

* For 8015 analysis, please report in 24 hours.

* For Arsenic analysis, please report in 24 hrs.

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-07-0372

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/7/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: SM

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
* ☑ Collection date/time, matrix, and/or # of containers logged in based on sample labels. ☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time ☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** SM

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 739

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 739

* (5-6) Collection date on label, 7/7/14, 836

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WORK ORDER NUMBER: 14-07-0556

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/14/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-07-0556

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Work Order Narrative

Work Order: 14-07-0556 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/09/14. They were assigned to Work Order 14-07-0556.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0556
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	07/09/14 17:30
		Number of Containers:	14
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
925-V-R/R-SS-001	14-07-0556-1	07/09/14 08:23	1	Solid
925-V-R/R-SS-002	14-07-0556-2	07/09/14 08:25	1	Solid
925-V-R/R-SS-003	14-07-0556-3	07/09/14 08:27	1	Solid
925-V-R/R-SS-004	14-07-0556-4	07/09/14 08:31	1	Solid
925-V-R/R-SS-005	14-07-0556-5	07/09/14 08:35	1	Solid
925-V-R/R-SS-006	14-07-0556-6	07/09/14 08:36	1	Solid
925-V-R/R-SS-007	14-07-0556-7	07/09/14 08:37	1	Solid
W-83	14-07-0556-8	07/09/14 10:59	1	Solid
W-84	14-07-0556-9	07/09/14 11:00	1	Solid
W-85	14-07-0556-10	07/09/14 11:01	1	Solid
W-86	14-07-0556-11	07/09/14 11:08	1	Solid
W-87	14-07-0556-12	07/09/14 11:09	1	Solid
W-88	14-07-0556-13	07/09/14 11:10	1	Solid
W-89	14-07-0556-14	07/09/14 11:11	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0556
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/09/14
Attn:	Linda Conlan		Page 1 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
925-V-R/R-SS-001 (14-07-0556-1)						
Arsenic	1.14		0.769	mg/kg	EPA 6010B	EPA 3050B
Barium	143		0.513	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.387		0.256	mg/kg	EPA 6010B	EPA 3050B
Chromium	18.1		0.256	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.5		0.256	mg/kg	EPA 6010B	EPA 3050B
Copper	17.8		0.513	mg/kg	EPA 6010B	EPA 3050B
Lead	2.00		0.513	mg/kg	EPA 6010B	EPA 3050B
Nickel	13.2		0.256	mg/kg	EPA 6010B	EPA 3050B
Vanadium	40.6		0.256	mg/kg	EPA 6010B	EPA 3050B
Zinc	58.5		1.03	mg/kg	EPA 6010B	EPA 3050B
925-V-R/R-SS-002 (14-07-0556-2)						
Barium	125		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.368		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.6		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.3		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	15.9		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	2.03		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.5		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.5		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	52.4		0.985	mg/kg	EPA 6010B	EPA 3050B
925-V-R/R-SS-003 (14-07-0556-3)						
Barium	117		0.483	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.340		0.242	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.1		0.242	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.7		0.242	mg/kg	EPA 6010B	EPA 3050B
Copper	15.0		0.483	mg/kg	EPA 6010B	EPA 3050B
Lead	2.91		0.483	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.3		0.242	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.5		0.242	mg/kg	EPA 6010B	EPA 3050B
Zinc	50.8		0.966	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0556
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/09/14
Attn:	Linda Conlan		Page 2 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
925-V-R/R-SS-004 (14-07-0556-4)						
Arsenic	5.08		0.728	mg/kg	EPA 6010B	EPA 3050B
Barium	151		0.485	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.481		0.243	mg/kg	EPA 6010B	EPA 3050B
Chromium	46.4		0.243	mg/kg	EPA 6010B	EPA 3050B
Cobalt	31.7		0.243	mg/kg	EPA 6010B	EPA 3050B
Copper	116		0.485	mg/kg	EPA 6010B	EPA 3050B
Lead	90.3		0.485	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.589		0.243	mg/kg	EPA 6010B	EPA 3050B
Nickel	45.3		0.243	mg/kg	EPA 6010B	EPA 3050B
Vanadium	39.7		0.243	mg/kg	EPA 6010B	EPA 3050B
Zinc	237		0.971	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.171		0.0833	mg/kg	EPA 7471A	EPA 7471A Total
C19-C20	6.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	10		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	23		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	29		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	18		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	120		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
Aroclor-1248	530		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	110		50	ug/kg	EPA 8082	EPA 3540C
925-V-R/R-SS-005 (14-07-0556-5)						
Barium	123		0.476	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.376		0.238	mg/kg	EPA 6010B	EPA 3050B
Chromium	17.3		0.238	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.5		0.238	mg/kg	EPA 6010B	EPA 3050B
Copper	16.6		0.476	mg/kg	EPA 6010B	EPA 3050B
Lead	2.06		0.476	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.0		0.238	mg/kg	EPA 6010B	EPA 3050B
Vanadium	40.2		0.238	mg/kg	EPA 6010B	EPA 3050B
Zinc	49.8		0.952	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0556
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/09/14
Attn:	Linda Conlan		Page 3 of 4

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
925-V-R/R-SS-006 (14-07-0556-6)						
Barium	120		0.508	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.347		0.254	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.4		0.254	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.9		0.254	mg/kg	EPA 6010B	EPA 3050B
Copper	15.0		0.508	mg/kg	EPA 6010B	EPA 3050B
Lead	3.22		0.508	mg/kg	EPA 6010B	EPA 3050B
Nickel	11.5		0.254	mg/kg	EPA 6010B	EPA 3050B
Vanadium	37.4		0.254	mg/kg	EPA 6010B	EPA 3050B
Zinc	54.3		1.02	mg/kg	EPA 6010B	EPA 3050B
925-V-R/R-SS-007 (14-07-0556-7)						
Barium	113		0.510	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.336		0.255	mg/kg	EPA 6010B	EPA 3050B
Chromium	16.3		0.255	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.6		0.255	mg/kg	EPA 6010B	EPA 3050B
Copper	17.4		0.510	mg/kg	EPA 6010B	EPA 3050B
Lead	6.45		0.510	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.299		0.255	mg/kg	EPA 6010B	EPA 3050B
Nickel	12.7		0.255	mg/kg	EPA 6010B	EPA 3050B
Vanadium	35.8		0.255	mg/kg	EPA 6010B	EPA 3050B
Zinc	54.0		1.02	mg/kg	EPA 6010B	EPA 3050B
C17-C18	34		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	54		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	62		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	67		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	72		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	74		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	26		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	410		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
W-83 (14-07-0556-8)						
Arsenic	5.42		0.758	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	1000		250	ug/kg	EPA 8082	EPA 3540C
W-86 (14-07-0556-11)						
Arsenic	6.62		0.750	mg/kg	EPA 6010B	EPA 3050B
W-89 (14-07-0556-14)						
Arsenic	13.5		0.754	mg/kg	EPA 6010B	EPA 3050B
Aroclor-1248	650		50	ug/kg	EPA 8082	EPA 3540C

* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-0556
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/09/14
Attn:	Linda Conlan		Page 4 of 4

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-001	**14-07-0556-1-A**	**07/09/14 08:23**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 20:06**	**140709B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	75	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-002	**14-07-0556-2-A**	**07/09/14 08:25**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 20:24**	**140709B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	ND	5.1	1.00	
C21-C22	ND	5.1	1.00	
C23-C24	ND	5.1	1.00	
C25-C28	ND	5.1	1.00	
C29-C32	ND	5.1	1.00	
C33-C36	ND	5.1	1.00	
C37-C40	ND	5.1	1.00	
C41-C44	ND	5.1	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	70	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-003	**14-07-0556-3-A**	**07/09/14 08:27**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 20:40**	**140709B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	88	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-004	**14-07-0556-4-A**	**07/09/14 08:31**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 20:58**	**140709B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	6.0	5.0	1.00	
C21-C22	10	5.0	1.00	
C23-C24	11	5.0	1.00	
C25-C28	23	5.0	1.00	
C29-C32	29	5.0	1.00	
C33-C36	18	5.0	1.00	
C37-C40	13	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	120	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	67	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-005	**14-07-0556-5-A**	**07/09/14 08:35**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 21:16**	**140709B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-006	**14-07-0556-6-A**	**07/09/14 08:36**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 21:34**	**140709B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-007	**14-07-0556-7-A**	**07/09/14 08:37**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 21:51**	**140709B03**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	34	5.0	1.00	
C19-C20	54	5.0	1.00	
C21-C22	62	5.0	1.00	
C23-C24	67	5.0	1.00	
C25-C28	72	5.0	1.00	
C29-C32	74	5.0	1.00	
C33-C36	26	5.0	1.00	
C37-C40	15	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	410	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-995**	**N/A**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 13:52**	**140709B03**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	82	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-83	**14-07-0556-8-A**	**07/09/14 10:59**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:23**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	5.42	0.758	1.01	

W-84	**14-07-0556-9-A**	**07/09/14 11:00**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:24**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.769	1.03	

W-85	**14-07-0556-10-A**	**07/09/14 11:01**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:25**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.735	0.980	

W-86	**14-07-0556-11-A**	**07/09/14 11:08**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:26**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	6.62	0.750	1.00	

W-87	**14-07-0556-12-A**	**07/09/14 11:09**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:27**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.746	0.995	

W-88	**14-07-0556-13-A**	**07/09/14 11:10**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:28**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.735	0.980	

W-89	**14-07-0556-14-A**	**07/09/14 11:11**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:29**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	13.5	0.754	1.01	

Method Blank	**097-01-002-18586**	**N/A**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 18:17**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-001	**14-07-0556-1-A**	**07/09/14 08:23**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:11**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.769	1.03	
Arsenic	1.14	0.769	1.03	
Barium	143	0.513	1.03	
Beryllium	0.387	0.256	1.03	
Cadmium	ND	0.513	1.03	
Chromium	18.1	0.256	1.03	
Cobalt	12.5	0.256	1.03	
Copper	17.8	0.513	1.03	
Lead	2.00	0.513	1.03	
Molybdenum	ND	0.256	1.03	
Nickel	13.2	0.256	1.03	
Selenium	ND	0.769	1.03	
Silver	ND	0.256	1.03	
Thallium	ND	0.769	1.03	
Vanadium	40.6	0.256	1.03	
Zinc	58.5	1.03	1.03	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-002	**14-07-0556-2-A**	**07/09/14 08:25**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:12**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	ND	0.739	0.985	
Barium	125	0.493	0.985	
Beryllium	0.368	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	16.6	0.246	0.985	
Cobalt	11.3	0.246	0.985	
Copper	15.9	0.493	0.985	
Lead	2.03	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	11.5	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	38.5	0.246	0.985	
Zinc	52.4	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-003	**14-07-0556-3-A**	**07/09/14 08:27**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:13**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.725	0.966	
Arsenic	ND	0.725	0.966	
Barium	117	0.483	0.966	
Beryllium	0.340	0.242	0.966	
Cadmium	ND	0.483	0.966	
Chromium	16.1	0.242	0.966	
Cobalt	10.7	0.242	0.966	
Copper	15.0	0.483	0.966	
Lead	2.91	0.483	0.966	
Molybdenum	ND	0.242	0.966	
Nickel	11.3	0.242	0.966	
Selenium	ND	0.725	0.966	
Silver	ND	0.242	0.966	
Thallium	ND	0.725	0.966	
Vanadium	35.5	0.242	0.966	
Zinc	50.8	0.966	0.966	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-004	**14-07-0556-4-A**	**07/09/14 08:31**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:15**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.728	0.971	
Arsenic	5.08	0.728	0.971	
Barium	151	0.485	0.971	
Beryllium	0.481	0.243	0.971	
Cadmium	ND	0.485	0.971	
Chromium	46.4	0.243	0.971	
Cobalt	31.7	0.243	0.971	
Copper	116	0.485	0.971	
Lead	90.3	0.485	0.971	
Molybdenum	0.589	0.243	0.971	
Nickel	45.3	0.243	0.971	
Selenium	ND	0.728	0.971	
Silver	ND	0.243	0.971	
Thallium	ND	0.728	0.971	
Vanadium	39.7	0.243	0.971	
Zinc	237	0.971	0.971	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-005	**14-07-0556-5-A**	**07/09/14 08:35**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:16**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.714	0.952	
Arsenic	ND	0.714	0.952	
Barium	123	0.476	0.952	
Beryllium	0.376	0.238	0.952	
Cadmium	ND	0.476	0.952	
Chromium	17.3	0.238	0.952	
Cobalt	11.5	0.238	0.952	
Copper	16.6	0.476	0.952	
Lead	2.06	0.476	0.952	
Molybdenum	ND	0.238	0.952	
Nickel	12.0	0.238	0.952	
Selenium	ND	0.714	0.952	
Silver	ND	0.238	0.952	
Thallium	ND	0.714	0.952	
Vanadium	40.2	0.238	0.952	
Zinc	49.8	0.952	0.952	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-006	**14-07-0556-6-A**	**07/09/14 08:36**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:21**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.761	1.02	
Arsenic	ND	0.761	1.02	
Barium	120	0.508	1.02	
Beryllium	0.347	0.254	1.02	
Cadmium	ND	0.508	1.02	
Chromium	16.4	0.254	1.02	
Cobalt	10.9	0.254	1.02	
Copper	15.0	0.508	1.02	
Lead	3.22	0.508	1.02	
Molybdenum	ND	0.254	1.02	
Nickel	11.5	0.254	1.02	
Selenium	ND	0.761	1.02	
Silver	ND	0.254	1.02	
Thallium	ND	0.761	1.02	
Vanadium	37.4	0.254	1.02	
Zinc	54.3	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-007	**14-07-0556-7-A**	**07/09/14 08:37**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:22**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.765	1.02	
Arsenic	ND	0.765	1.02	
Barium	113	0.510	1.02	
Beryllium	0.336	0.255	1.02	
Cadmium	ND	0.510	1.02	
Chromium	16.3	0.255	1.02	
Cobalt	10.6	0.255	1.02	
Copper	17.4	0.510	1.02	
Lead	6.45	0.510	1.02	
Molybdenum	0.299	0.255	1.02	
Nickel	12.7	0.255	1.02	
Selenium	ND	0.765	1.02	
Silver	ND	0.255	1.02	
Thallium	ND	0.765	1.02	
Vanadium	35.8	0.255	1.02	
Zinc	54.0	1.02	1.02	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18586**	**N/A**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 18:17**	**140709L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-001	**14-07-0556-1-A**	**07/09/14 08:23**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:29**	**140709L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

925-V-R/R-SS-002	**14-07-0556-2-A**	**07/09/14 08:25**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:32**	**140709L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

925-V-R/R-SS-003	**14-07-0556-3-A**	**07/09/14 08:27**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:34**	**140709L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

925-V-R/R-SS-004	**14-07-0556-4-A**	**07/09/14 08:31**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:36**	**140709L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.171	0.0833	1.00	

925-V-R/R-SS-005	**14-07-0556-5-A**	**07/09/14 08:35**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:38**	**140709L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0794	1.00	

925-V-R/R-SS-006	**14-07-0556-6-A**	**07/09/14 08:36**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:41**	**140709L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0820	1.00	

925-V-R/R-SS-007	**14-07-0556-7-A**	**07/09/14 08:37**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:43**	**140709L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

Method Blank	**099-16-272-376**	**N/A**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:05**	**140709L09**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-001	**14-07-0556-1-A**	**07/09/14 08:23**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 10:19**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	109	60-125	
2,4,5,6-Tetrachloro-m-Xylene	103	50-130	

925-V-R/R-SS-002	**14-07-0556-2-A**	**07/09/14 08:25**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 10:37**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-003	**14-07-0556-3-A**	**07/09/14 08:27**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 10:55**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

925-V-R/R-SS-004	**14-07-0556-4-A**	**07/09/14 08:31**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 11:13**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	530	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	110	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	87	50-130	

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-005	**14-07-0556-5-A**	**07/09/14 08:35**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 11:31**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

925-V-R/R-SS-006	**14-07-0556-6-A**	**07/09/14 08:36**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 11:48**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

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AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
925-V-R/R-SS-007	**14-07-0556-7-A**	**07/09/14 08:37**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 12:06**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	51	1.00	
Aroclor-1221	ND	51	1.00	
Aroclor-1232	ND	51	1.00	
Aroclor-1242	ND	51	1.00	
Aroclor-1248	ND	51	1.00	
Aroclor-1254	ND	51	1.00	
Aroclor-1260	ND	51	1.00	
Aroclor-1262	ND	51	1.00	
Aroclor-1268	ND	51	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	104	50-130	

W-83	**14-07-0556-8-A**	**07/09/14 10:59**	**Solid**	**GC 66**	**07/09/14**	**07/12/14 14:46**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	250	5.00	
Aroclor-1221	ND	250	5.00	
Aroclor-1232	ND	250	5.00	
Aroclor-1242	ND	250	5.00	
Aroclor-1248	1000	250	5.00	
Aroclor-1254	ND	250	5.00	
Aroclor-1260	ND	250	5.00	
Aroclor-1262	ND	250	5.00	
Aroclor-1268	ND	250	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	60-125	
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-84	**14-07-0556-9-A**	**07/09/14 11:00**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 12:42**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	99	50-130	

W-85	**14-07-0556-10-A**	**07/09/14 11:01**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 16:46**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	60-125	
2,4,5,6-Tetrachloro-m-Xylene	117	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-86	**14-07-0556-11-A**	**07/09/14 11:08**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 17:04**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

W-87	**14-07-0556-12-A**	**07/09/14 11:09**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 17:21**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-88	**14-07-0556-13-A**	**07/09/14 11:10**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 17:44**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	60-125	
2,4,5,6-Tetrachloro-m-Xylene	98	50-130	

W-89	**14-07-0556-14-A**	**07/09/14 11:11**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 18:02**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	650	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	106	60-125	
2,4,5,6-Tetrachloro-m-Xylene	102	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-283**	**N/A**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 09:44**	**140709L18**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0461-1	**Sample**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 15:20**	**140709S03**
14-07-0461-1	**Matrix Spike**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 14:45**	**140709S03**
14-07-0461-1	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 15:03**	**140709S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	70.01	400.0	472.5	101	473.7	101	64-130	0	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-86	**Sample**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:26**	**140709S03**
W-86	**Matrix Spike**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:09**	**140709S03**
W-86	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 19:10**	**140709S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	11.65	47	12.09	48	50-115	4	0-20	3
Arsenic	6.616	25.00	29.89	93	30.82	97	75-125	3	0-20	
Barium	112.2	25.00	134.5	4X	139.2	4X	75-125	4X	0-20	Q
Beryllium	0.3374	25.00	25.40	100	25.96	103	75-125	2	0-20	
Cadmium	ND	25.00	24.88	100	25.13	101	75-125	1	0-20	
Chromium	14.77	25.00	40.24	102	40.66	104	75-125	1	0-20	
Cobalt	10.40	25.00	36.43	104	36.30	104	75-125	0	0-20	
Copper	13.86	25.00	40.24	106	41.88	112	75-125	4	0-20	
Lead	2.849	25.00	29.16	105	29.93	108	75-125	3	0-20	
Molybdenum	ND	25.00	25.09	100	25.03	100	75-125	0	0-20	
Nickel	10.71	25.00	35.66	100	35.75	100	75-125	0	0-20	
Selenium	ND	25.00	22.65	91	22.57	90	75-125	0	0-20	
Silver	ND	12.50	14.59	117	14.70	118	75-125	1	0-20	
Thallium	ND	25.00	18.67	75	18.56	74	75-125	1	0-20	3
Vanadium	35.58	25.00	60.27	99	61.06	102	75-125	1	0-20	
Zinc	55.58	25.00	76.46	84	81.11	102	75-125	6	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0371-1	**Sample**	**Sediment**	**Mercury 05**	**07/09/14**	**07/09/14 21:09**	**140709S09**
14-07-0371-1	**Matrix Spike**	**Sediment**	**Mercury 05**	**07/09/14**	**07/09/14 21:11**	**140709S09**
14-07-0371-1	**Matrix Spike Duplicate**	**Sediment**	**Mercury 05**	**07/09/14**	**07/09/14 21:14**	**140709S09**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8940	107	0.8750	105	76-136	2	0-16	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-89	**Sample**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 18:02**	**140709S18**
W-89	**Matrix Spike**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 18:20**	**140709S18**
W-89	**Matrix Spike Duplicate**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 18:38**	**140709S18**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	175.0	175	186.5	187	50-135	6	0-25	3
Aroclor-1260	ND	100.0	171.0	171	223.6	224	50-135	27	0-25	3,4

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-995	**LCS**	**Solid**	**GC 46**	**07/09/14**	**07/09/14 14:09**	**140709B03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	450.5	113	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18586	**LCS**	**Solid**	**ICP 7300**	**07/09/14**	**07/10/14 18:24**	**140709L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	28.52	114	80-120	73-127	
Arsenic	25.00	24.80	99	80-120	73-127	
Barium	25.00	26.43	106	80-120	73-127	
Beryllium	25.00	25.39	102	80-120	73-127	
Cadmium	25.00	26.45	106	80-120	73-127	
Chromium	25.00	26.98	108	80-120	73-127	
Cobalt	25.00	27.91	112	80-120	73-127	
Copper	25.00	25.89	104	80-120	73-127	
Lead	25.00	26.54	106	80-120	73-127	
Molybdenum	25.00	26.09	104	80-120	73-127	
Nickel	25.00	27.95	112	80-120	73-127	
Selenium	25.00	23.08	92	80-120	73-127	
Silver	12.50	15.12	121	80-120	73-127	ME
Thallium	25.00	26.60	106	80-120	73-127	
Vanadium	25.00	26.05	104	80-120	73-127	
Zinc	25.00	25.91	104	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-376	**LCS**	**Solid**	**Mercury 05**	**07/09/14**	**07/09/14 21:07**	**140709L09**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7988	96	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/09/14
121 Innovation Drive, Suite 200		Work Order:	14-07-0556
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-283	**LCS**	**Solid**	**GC 66**	**07/09/14**	**07/11/14 10:01**	**140709L18**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	82.95	83	50-135	
Aroclor-1260	100.0	98.80	99	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-0556

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 46	1
EPA 8082	EPA 3540C	842	GC 66	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-0556 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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NB 31655

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 7-9-14

PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

14-07-0556

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: 48 HRS

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly A Cheminsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082	Title 22 Metals	EPA 8015	Arsenic	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7-9-14	0823	925-V-R/R-SS-001	X	X	X		4 oz glass jar	S			X		1	
2		0825	925-V-R/R-SS-002	X	X	X			S			X		1	
3		0827	925-V-R/R-SS-003	X	X	X			S			X		1	
4		0831	925-V-R/R-SS-004	X	X	X			S			X		1	
5		0835	925-V-R/R-SS-005	X	X	X			S			X		1	
6		0836	925-V-R/R-SS-006	X	X	X			S			X		1	
7		0837	925-V-R/R-SS-007	X	X	X			S			X		1	
8		1059	W-83	X			X		S			X		1	
9		1100	W-84	X			X		S			X		1	
10		1101	W-85	X			X		S			X		1	
11		1108	W-86	X			X		S			X		1	
12		1109	W-87	X			X		S			X		1	
13		1110	W-88	X			X		S			X		1	
14		1111	W-89	X			X		S			X		1	
									~~S~~			~~X~~		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	7/9/14	1435	SIGNATURE: [signature]	7/9/14	1435
PRINTED NAME: Stephen Huang			PRINTED NAME: Alex Marquez		
COMPANY: AMEC			COMPANY: ECI		
SIGNATURE: [signature]	7/9/14	1730	SIGNATURE: [signature]	7/9/14	1730
PRINTED NAME: Alex Marquez			PRINTED NAME: Yan Liao		
COMPANY: ECI			COMPANY: CCL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 14

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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WORK ORDER #: 14-07-0556

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/9/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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WORK ORDER NUMBER: 14-07-1073

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/17/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-07-1073

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Work Order Narrative

Work Order: 14-07-1073 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/16/14. They were assigned to Work Order 14-07-1073.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1073
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	07/16/14 16:02
		Number of Containers:	12
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1250	14-07-1073-1	07/16/14 08:43	1	Solid
W-96	14-07-1073-2	07/16/14 12:41	1	Solid
W-97	14-07-1073-3	07/16/14 12:43	1	Solid
W-98	14-07-1073-4	07/16/14 12:49	1	Solid
W-99	14-07-1073-5	07/16/14 12:51	1	Solid
W-100	14-07-1073-6	07/16/14 12:58	1	Solid
W-101	14-07-1073-7	07/16/14 13:01	1	Solid
W-102	14-07-1073-8	07/16/14 13:09	1	Solid
W-103	14-07-1073-9	07/16/14 13:11	1	Solid
#1251	14-07-1073-10	07/16/14 13:40	1	Solid
#1252	14-07-1073-11	07/16/14 13:43	1	Solid
#1253	14-07-1073-12	07/16/14 13:45	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1073
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/16/14
Attn:	Linda Conlan		Page 1 of 2

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1250 (14-07-1073-1)						
Barium	148		0.498	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.417		0.249	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.7		0.249	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.64		0.249	mg/kg	EPA 6010B	EPA 3050B
Copper	13.9		0.498	mg/kg	EPA 6010B	EPA 3050B
Lead	8.45		0.498	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.4		0.249	mg/kg	EPA 6010B	EPA 3050B
Vanadium	34.3		0.249	mg/kg	EPA 6010B	EPA 3050B
Zinc	47.7		0.995	mg/kg	EPA 6010B	EPA 3050B
C6-C44 Total	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
W-96 (14-07-1073-2)						
Arsenic	34.3		0.750	mg/kg	EPA 6010B	EPA 3050B
W-98 (14-07-1073-4)						
Arsenic	26.7		0.746	mg/kg	EPA 6010B	EPA 3050B
W-99 (14-07-1073-5)						
Arsenic	10.0		0.743	mg/kg	EPA 6010B	EPA 3050B
W-100 (14-07-1073-6)						
Arsenic	5.78		0.739	mg/kg	EPA 6010B	EPA 3050B
W-101 (14-07-1073-7)						
Arsenic	1.19		0.758	mg/kg	EPA 6010B	EPA 3050B
#1251 (14-07-1073-10)						
C9-C10	380		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	220		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	28		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	43		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	52		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	82		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	190		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	560		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	510		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	380		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	170		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2600		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1073
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/16/14
Attn:	Linda Conlan		Page 2 of 2

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1252 (14-07-1073-11)						
C8	52		25	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	2100		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	1900		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	56		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	57		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	64		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	46		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	51		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	69		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	180		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	670		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	550		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	320		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	6200		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1253 (14-07-1073-12)						
C9-C10	30		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	250		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	440		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	60		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	30		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	34		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	42		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	68		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	130		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	180		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	110		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	76		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	30		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1500		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1250	**14-07-1073-1-A**	**07/16/14 08:43**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 03:44**	**140716B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	11	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	88	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1251	**14-07-1073-10-A**	**07/16/14 13:40**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 09:47**	**140716B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	380	25	5.00	
C11-C12	220	25	5.00	
C13-C14	ND	25	5.00	
C15-C16	ND	25	5.00	
C17-C18	28	25	5.00	
C19-C20	43	25	5.00	
C21-C22	52	25	5.00	
C23-C24	82	25	5.00	
C25-C28	190	25	5.00	
C29-C32	560	25	5.00	
C33-C36	510	25	5.00	
C37-C40	380	25	5.00	
C41-C44	170	25	5.00	
C6-C44 Total	2600	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1252	**14-07-1073-11-A**	**07/16/14 13:43**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 10:03**	**140716B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	52	25	5.00	
C9-C10	2100	25	5.00	
C11-C12	1900	25	5.00	
C13-C14	56	25	5.00	
C15-C16	57	25	5.00	
C17-C18	64	25	5.00	
C19-C20	46	25	5.00	
C21-C22	51	25	5.00	
C23-C24	69	25	5.00	
C25-C28	180	25	5.00	
C29-C32	670	25	5.00	
C33-C36	550	25	5.00	
C37-C40	320	25	5.00	
C41-C44	120	25	5.00	
C6-C44 Total	6200	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1253	**14-07-1073-12-A**	**07/16/14 13:45**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 04:31**	**140716B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	30	4.9	1.00	
C11-C12	250	4.9	1.00	
C13-C14	440	4.9	1.00	
C15-C16	60	4.9	1.00	
C17-C18	30	4.9	1.00	
C19-C20	34	4.9	1.00	
C21-C22	42	4.9	1.00	
C23-C24	68	4.9	1.00	
C25-C28	130	4.9	1.00	
C29-C32	180	4.9	1.00	
C33-C36	110	4.9	1.00	
C37-C40	76	4.9	1.00	
C41-C44	30	4.9	1.00	
C6-C44 Total	1500	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-1012**	**N/A**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 01:54**	**140716B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-96	**14-07-1073-2-A**	**07/16/14 12:41**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:50**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	34.3	0.750	1.00	

W-97	**14-07-1073-3-A**	**07/16/14 12:43**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:55**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.754	1.01	

W-98	**14-07-1073-4-A**	**07/16/14 12:49**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:56**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	26.7	0.746	0.995	

W-99	**14-07-1073-5-A**	**07/16/14 12:51**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:57**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	10.0	0.743	0.990	

W-100	**14-07-1073-6-A**	**07/16/14 12:58**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:58**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	5.78	0.739	0.985	

W-101	**14-07-1073-7-A**	**07/16/14 13:01**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 21:05**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	1.19	0.758	1.01	

W-102	**14-07-1073-8-A**	**07/16/14 13:09**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 21:06**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.761	1.02	

W-103	**14-07-1073-9-A**	**07/16/14 13:11**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 21:07**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.743	0.990	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18607**	**N/A**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:46**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.750	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1250	**14-07-1073-1-A**	**07/16/14 08:43**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:53**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.746	0.995	
Arsenic	ND	0.746	0.995	
Barium	148	0.498	0.995	
Beryllium	0.417	0.249	0.995	
Cadmium	ND	0.498	0.995	
Chromium	15.7	0.249	0.995	
Cobalt	8.64	0.249	0.995	
Copper	13.9	0.498	0.995	
Lead	8.45	0.498	0.995	
Molybdenum	ND	0.249	0.995	
Nickel	10.4	0.249	0.995	
Selenium	ND	0.746	0.995	
Silver	ND	0.249	0.995	
Thallium	ND	0.746	0.995	
Vanadium	34.3	0.249	0.995	
Zinc	47.7	0.995	0.995	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18607**	**N/A**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:46**	**140716L03**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1250	**14-07-1073-1-A**	**07/16/14 08:43**	**Solid**	**Mercury 05**	**07/16/14**	**07/16/14 21:32**	**140716L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0847	1.00	

Method Blank	**099-16-272-389**	**N/A**	**Solid**	**Mercury 05**	**07/16/14**	**07/16/14 20:19**	**140716L04**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-1042-4	**Sample**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 03:28**	**140716S10**
14-07-1042-4	**Matrix Spike**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 02:25**	**140716S10**
14-07-1042-4	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 02:41**	**140716S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	405.1	101	419.8	105	64-130	4	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-96	**Sample**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:50**	**140716S03**
W-96	**Matrix Spike**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:51**	**140716S03**
W-96	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:52**	**140716S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	9.786	39	7.002	28	50-115	33	0-20	3,4
Arsenic	34.32	25.00	59.63	101	60.11	103	75-125	1	0-20	
Barium	101.2	25.00	126.4	4X	128.9	4X	75-125	4X	0-20	Q
Beryllium	0.3281	25.00	26.58	105	25.66	101	75-125	4	0-20	
Cadmium	ND	25.00	25.93	104	25.43	102	75-125	2	0-20	
Chromium	14.42	25.00	40.39	104	40.91	106	75-125	1	0-20	
Cobalt	9.205	25.00	36.54	109	36.35	109	75-125	1	0-20	
Copper	18.02	25.00	43.02	100	42.09	96	75-125	2	0-20	
Lead	7.851	25.00	31.99	97	30.00	89	75-125	6	0-20	
Molybdenum	ND	25.00	25.93	104	25.29	101	75-125	3	0-20	
Nickel	10.38	25.00	36.88	106	36.67	105	75-125	1	0-20	
Selenium	ND	25.00	25.60	102	24.78	99	75-125	3	0-20	
Silver	ND	12.50	13.38	107	12.95	104	75-125	3	0-20	
Thallium	ND	25.00	20.65	83	20.11	80	75-125	3	0-20	
Vanadium	31.81	25.00	57.19	102	58.62	107	75-125	2	0-20	
Zinc	89.36	25.00	102.4	52	98.80	38	75-125	4	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-0814-2	**Sample**	**Solid**	**Mercury 05**	**07/16/14**	**07/16/14 20:24**	**140716S04**
14-07-0814-2	**Matrix Spike**	**Solid**	**Mercury 05**	**07/16/14**	**07/16/14 20:26**	**140716S04**
14-07-0814-2	**Matrix Spike Duplicate**	**Solid**	**Mercury 05**	**07/16/14**	**07/16/14 20:46**	**140716S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8454	101	0.9093	109	71-137	7	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1012	**LCS**	**Solid**	**GC 48**	**07/16/14**	**07/17/14 02:09**	**140716B10A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	345.8	86	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18607	**LCS**	**Solid**	**ICP 7300**	**07/16/14**	**07/16/14 20:49**	**140716L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	27.12	108	80-120	73-127	
Arsenic	25.00	25.26	101	80-120	73-127	
Barium	25.00	26.62	106	80-120	73-127	
Beryllium	25.00	24.60	98	80-120	73-127	
Cadmium	25.00	26.25	105	80-120	73-127	
Chromium	25.00	26.28	105	80-120	73-127	
Cobalt	25.00	27.80	111	80-120	73-127	
Copper	25.00	25.56	102	80-120	73-127	
Lead	25.00	26.66	107	80-120	73-127	
Molybdenum	25.00	26.10	104	80-120	73-127	
Nickel	25.00	27.32	109	80-120	73-127	
Selenium	25.00	24.12	96	80-120	73-127	
Silver	12.50	13.34	107	80-120	73-127	
Thallium	25.00	26.47	106	80-120	73-127	
Vanadium	25.00	25.44	102	80-120	73-127	
Zinc	25.00	26.23	105	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/16/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1073
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-389	**LCS**	**Solid**	**Mercury 05**	**07/16/14**	**07/16/14 20:21**	**140716L04**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8015	96	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-1073

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 05	1
EPA 8015B (M)	EPA 3550B	847	GC 48	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-1073 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31661

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 7-16-14 PAGE 1 OF 1

PROJECT NUMBER: 0106270030

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS:

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: ~~48 HR~~ 24 HR

14-07-1073

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chomunsky

ANALYSES

	DATE	TIME	SAMPLE NUMBER	Arsenic	Title 22 Metals	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7-16-14	0843	#1250		X	X	4 oz glass jar	S			X		1	
2		1241	W-96	X				S			X		1	
3		1243	W-97	X				S			X		1	
4		1249	W-98	X				S			X		1	
5		1251	W-99	X				S			X		1	
6		1258	W-100	X				S			X		1	
7		1301	W-101	X				S			X		1	
8		1309	W-102	X				S			X		1	
9		1311	W-103	X				S			X		1	
10		1340	#1251			X		S			X		1	
11		1343	#1252			X		S			X		1	
12		1345	#1253			X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	7/16/14	1500	SIGNATURE:	7/16/14	1500
PRINTED NAME: Stephen Wang			PRINTED NAME: Arthur Young		
COMPANY: AMEC			COMPANY: ECI		
SIGNATURE:	7/16/14	1602	SIGNATURE:	7/16/14	1602
PRINTED NAME: Arthur Young			PRINTED NAME: Percy Soriano		
COMPANY: ECI			COMPANY: ECI		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 12

SAMPLING COMMENTS:

~~* 24 HR TAT FOR~~

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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WORK ORDER #: 14-07-1073

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/16/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.4 °C - 0.3 °C (CF) = 2.1 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** SD3

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** SD3

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** BG

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** BG

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** TB

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** TB

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WORK ORDER NUMBER: 14-07-1516

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/23/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-07-1516

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Work Order Narrative

Work Order: 14-07-1516 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/22/14. They were assigned to Work Order 14-07-1516.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1516
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	07/22/14 17:36
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1264	14-07-1516-1	07/22/14 09:34	1	Solid
#1265	14-07-1516-2	07/22/14 09:36	1	Solid
#1266	14-07-1516-3	07/22/14 09:37	1	Solid
#1267	14-07-1516-4	07/22/14 09:38	1	Solid
#1268	14-07-1516-5	07/22/14 09:40	1	Solid
#1269	14-07-1516-6	07/22/14 09:42	1	Solid
#1270	14-07-1516-7	07/22/14 09:43	1	Solid
#1271	14-07-1516-8	07/22/14 09:45	1	Solid
#1272	14-07-1516-9	07/22/14 09:48	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1516
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/22/14
Attn:	Linda Conlan		Page 1 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1264 (14-07-1516-1)						
C8	32		25	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	1800		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	1100		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	350		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	62		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	31		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	3500		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1265 (14-07-1516-2)						
C11-C12	8.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	22		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1266 (14-07-1516-3)						
C9-C10	95		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	1000		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	1900		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	40		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	71		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	34		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	30		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	38		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	50		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	60		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	37		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	3400		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1516
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/22/14
Attn:	Linda Conlan		Page 2 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1268 (14-07-1516-5)						
C9-C10	30		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	38		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	8.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	7.9		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	25		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	48		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	62		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	51		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	39		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	18		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	360		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1269 (14-07-1516-6)						
C9-C10	170		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	830		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	750		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	55		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	110		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	100		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	79		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	74		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	110		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	200		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	170		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	130		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	47		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2800		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1516
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	07/22/14
Attn:	Linda Conlan		Page 3 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1270 (14-07-1516-7)						
C9-C10	240		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	42		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	71		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	120		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	160		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	190		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	190		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	200		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	480		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	290		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	200		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	92		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2400		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1271 (14-07-1516-8)						
C8	330		50	mg/kg	EPA 8015B (M)	EPA 3550B
C9-C10	5400		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	3900		50	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	140		50	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	63		50	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	51		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	64		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	110		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	510		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	500		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	84		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	11000		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1264	**14-07-1516-1-A**	**07/22/14 09:34**	**Solid**	**GC 48**	**07/22/14**	**07/23/14 09:39**	**140722B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	32	25	5.00	
C9-C10	1800	25	5.00	
C11-C12	1100	25	5.00	
C13-C14	350	25	5.00	
C15-C16	62	25	5.00	
C17-C18	31	25	5.00	
C19-C20	ND	25	5.00	
C21-C22	ND	25	5.00	
C23-C24	ND	25	5.00	
C25-C28	ND	25	5.00	
C29-C32	ND	25	5.00	
C33-C36	ND	25	5.00	
C37-C40	ND	25	5.00	
C41-C44	ND	25	5.00	
C6-C44 Total	3500	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	106	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1265	**14-07-1516-2-A**	**07/22/14 09:36**	**Solid**	**GC 48**	**07/22/14**	**07/22/14 23:54**	**140722B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	8.6	5.0	1.00	
C13-C14	11	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	22	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1266	**14-07-1516-3-A**	**07/22/14 09:37**	**Solid**	**GC 48**	**07/22/14**	**07/23/14 09:55**	**140722B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	95	25	5.00	
C11-C12	1000	25	5.00	
C13-C14	1900	25	5.00	
C15-C16	40	25	5.00	
C17-C18	71	25	5.00	
C19-C20	34	25	5.00	
C21-C22	30	25	5.00	
C23-C24	38	25	5.00	
C25-C28	50	25	5.00	
C29-C32	60	25	5.00	
C33-C36	37	25	5.00	
C37-C40	ND	25	5.00	
C41-C44	ND	25	5.00	
C6-C44 Total	3400	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	103	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1267	**14-07-1516-4-A**	**07/22/14 09:38**	**Solid**	**GC 48**	**07/22/14**	**07/23/14 00:25**	**140722B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1268	**14-07-1516-5-A**	**07/22/14 09:40**	**Solid**	**GC 48**	**07/22/14**	**07/23/14 00:41**	**140722B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	30	5.0	1.00	
C11-C12	38	5.0	1.00	
C13-C14	8.3	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	7.9	5.0	1.00	
C19-C20	11	5.0	1.00	
C21-C22	17	5.0	1.00	
C23-C24	25	5.0	1.00	
C25-C28	48	5.0	1.00	
C29-C32	62	5.0	1.00	
C33-C36	51	5.0	1.00	
C37-C40	39	5.0	1.00	
C41-C44	18	5.0	1.00	
C6-C44 Total	360	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1269	**14-07-1516-6-A**	**07/22/14 09:42**	**Solid**	**GC 48**	**07/22/14**	**07/23/14 00:57**	**140722B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	170	25	5.00	
C11-C12	830	25	5.00	
C13-C14	750	25	5.00	
C15-C16	55	25	5.00	
C17-C18	110	25	5.00	
C19-C20	100	25	5.00	
C21-C22	79	25	5.00	
C23-C24	74	25	5.00	
C25-C28	110	25	5.00	
C29-C32	200	25	5.00	
C33-C36	170	25	5.00	
C37-C40	130	25	5.00	
C41-C44	47	25	5.00	
C6-C44 Total	2800	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1270	**14-07-1516-7-A**	**07/22/14 09:43**	**Solid**	**GC 48**	**07/22/14**	**07/23/14 10:11**	**140722B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	240	25	5.00	
C11-C12	120	25	5.00	
C13-C14	42	25	5.00	
C15-C16	71	25	5.00	
C17-C18	120	25	5.00	
C19-C20	160	25	5.00	
C21-C22	190	25	5.00	
C23-C24	190	25	5.00	
C25-C28	200	25	5.00	
C29-C32	480	25	5.00	
C33-C36	290	25	5.00	
C37-C40	200	25	5.00	
C41-C44	92	25	5.00	
C6-C44 Total	2400	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1271	**14-07-1516-8-A**	**07/22/14 09:45**	**Solid**	**GC 48**	**07/22/14**	**07/23/14 10:28**	**140722B10A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	330	50	10.0	
C9-C10	5400	50	10.0	
C11-C12	3900	50	10.0	
C13-C14	140	50	10.0	
C15-C16	63	50	10.0	
C17-C18	51	50	10.0	
C19-C20	ND	50	10.0	
C21-C22	ND	50	10.0	
C23-C24	64	50	10.0	
C25-C28	110	50	10.0	
C29-C32	510	50	10.0	
C33-C36	500	50	10.0	
C37-C40	84	50	10.0	
C41-C44	ND	50	10.0	
C6-C44 Total	11000	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	93	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1272	**14-07-1516-9-A**	**07/22/14 09:48**	**Solid**	**GC 48**	**07/22/14**	**07/23/14 01:45**	**140722B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	94	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-1029**	**N/A**	**Solid**	**GC 48**	**07/22/14**	**07/22/14 20:43**	**140722B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	87	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-1503-14	**Sample**	**Solid**	**GC 48**	**07/22/14**	**07/22/14 22:03**	**140722S10**
14-07-1503-14	**Matrix Spike**	**Solid**	**GC 48**	**07/22/14**	**07/22/14 21:14**	**140722S10**
14-07-1503-14	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**07/22/14**	**07/22/14 21:30**	**140722S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	495.2	124	486.8	122	64-130	2	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/22/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1516
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1029	**LCS**	**Solid**	**GC 48**	**07/22/14**	**07/22/14 20:59**	**140722B10A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	450.3	113	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-1516

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 48	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-1516 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31481

PROJECT NAME: Former Pechiney Cast Plate Facility

DATE: 7-22-14 PAGE 1 OF 1

PROJECT NUMBER: 01062700 30

LABORATORY NAME: Calscience

CLIENT INFORMATION: AMEC

REPORTING REQUIREMENTS: 14-07-1516

RESULTS TO: Linda Conlan

LABORATORY ADDRESS:

TURNAROUND TIME: ~~48 HR~~ 24 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY CONTACT: Steve Nowak

LABORATORY PHONE NUMBER:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES: EPA 8015

	DATE	TIME	SAMPLE NUMBER	EPA 8015	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7-22-14	0934	#1264	X	4 oz glass jar	S			X		1	
2		0936	#1265	X		S			X		1	
3		0937	#1266	X		S			X		1	
4		0938	#1267	X		S			X		1	
5		0940	#1268	X		S			X		1	
6		0942	#1269	X		S			X		1	
7		0943	#1270	X		S			X		1	
8		0945	#1271	X		S			X		1	
9		0948	#1272	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly H Chominsky COMPANY: AMEC	7/22/14	1445	SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	7/22/14	1445
SIGNATURE: PRINTED NAME: Stephen Hwang COMPANY: AMEC	7/22/14	1510	SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: ECI	7/22/14	1510
SIGNATURE: PRINTED NAME: Alex Marquez COMPANY: ECI	7/22/14	1736	SIGNATURE: PRINTED NAME: Yau Liao COMPANY: ECI	7/22/14	1736 ~~1510~~ 8/L 7/22/14

TOTAL NUMBER OF CONTAINERS: 9

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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WORK ORDER #: 14-07-1516

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/22/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 659

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 659

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** SMG

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** SMG

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WORK ORDER NUMBER: 14-07-1870

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/29/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-07-1870

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Work Order Narrative

Work Order: 14-07-1870 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/28/14. They were assigned to Work Order 14-07-1870.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1870
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	07/28/14 16:45
		Number of Containers:	9
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1304	14-07-1870-1	07/28/14 10:05	1	Solid
#1305	14-07-1870-2	07/28/14 10:06	1	Solid
#1306	14-07-1870-3	07/28/14 10:37	1	Solid
#1307	14-07-1870-4	07/28/14 10:38	1	Solid
#1308	14-07-1870-5	07/28/14 10:42	1	Solid
#1309	14-07-1870-6	07/28/14 10:44	1	Solid
#1310	14-07-1870-7	07/28/14 10:46	1	Solid
#1311	14-07-1870-8	07/28/14 10:47	1	Solid
#1312	14-07-1870-9	07/28/14 10:49	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1870
		Project Name:	Former Pechiney Cast Plate / 0106270030
		Received:	07/28/14
Attn:	Linda Conlan		Page 1 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1304 (14-07-1870-1)						
C6-C44 Total	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1306 (14-07-1870-3)						
C9-C10	300		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	590		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	370		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	35		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	28		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	25		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	36		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	160		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	110		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	110		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	36		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	1800		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1308 (14-07-1870-5)						
C9-C10	170		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	120		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	70		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	11		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	25		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	31		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	25		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	27		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	28		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	44		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	41		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	23		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	14		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	630		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-1870
		Project Name:	Former Pechiney Cast Plate / 0106270030
		Received:	07/28/14
Attn:	Linda Conlan		Page 2 of 3

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1309 (14-07-1870-6)						
C9-C10	150		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	150		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	170		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	43		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	56		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	72		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	190		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	290		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	770		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	510		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	300		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	110		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2800		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1310 (14-07-1870-7)						
C9-C10	240		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	2300		50	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	2300		50	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	110		50	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	130		50	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	120		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	240		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	440		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	520		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	350		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	230		50	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	52		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	7100		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	14-07-1870 Former Pechiney Cast Plate / 0106270030 07/28/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1312 (14-07-1870-9)						
C9-C10	340		50	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	970		50	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	1000		50	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	64		50	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	75		50	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	97		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	290		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	580		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	910		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	540		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	350		50	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	110		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	5300		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1304	**14-07-1870-1-A**	**07/28/14 10:05**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 04:40**	**140728B16**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	11	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	76	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1305	**14-07-1870-2-A**	**07/28/14 10:06**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 04:55**	**140728B16**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	85	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1306	**14-07-1870-3-A**	**07/28/14 10:37**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 09:40**	**140728B16**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	300	25	5.00	
C11-C12	590	25	5.00	
C13-C14	370	25	5.00	
C15-C16	35	25	5.00	
C17-C18	ND	25	5.00	
C19-C20	28	25	5.00	
C21-C22	25	25	5.00	
C23-C24	36	25	5.00	
C25-C28	ND	25	5.00	
C29-C32	160	25	5.00	
C33-C36	110	25	5.00	
C37-C40	110	25	5.00	
C41-C44	36	25	5.00	
C6-C44 Total	1800	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	88	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1307	**14-07-1870-4-A**	**07/28/14 10:38**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 05:27**	**140728B16**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1308	**14-07-1870-5-A**	**07/28/14 10:42**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 05:43**	**140728B16**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	170	4.9	1.00	
C11-C12	120	4.9	1.00	
C13-C14	70	4.9	1.00	
C15-C16	11	4.9	1.00	
C17-C18	25	4.9	1.00	
C19-C20	31	4.9	1.00	
C21-C22	25	4.9	1.00	
C23-C24	27	4.9	1.00	
C25-C28	28	4.9	1.00	
C29-C32	44	4.9	1.00	
C33-C36	41	4.9	1.00	
C37-C40	23	4.9	1.00	
C41-C44	14	4.9	1.00	
C6-C44 Total	630	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1309	**14-07-1870-6-A**	**07/28/14 10:44**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 09:55**	**140728B16**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	150	25	5.00	
C11-C12	150	25	5.00	
C13-C14	170	25	5.00	
C15-C16	ND	25	5.00	
C17-C18	43	25	5.00	
C19-C20	56	25	5.00	
C21-C22	72	25	5.00	
C23-C24	190	25	5.00	
C25-C28	290	25	5.00	
C29-C32	770	25	5.00	
C33-C36	510	25	5.00	
C37-C40	300	25	5.00	
C41-C44	110	25	5.00	
C6-C44 Total	2800	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1310	**14-07-1870-7-A**	**07/28/14 10:46**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 10:11**	**140728B16**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	ND	50	10.0	
C9-C10	240	50	10.0	
C11-C12	2300	50	10.0	
C13-C14	2300	50	10.0	
C15-C16	ND	50	10.0	
C17-C18	110	50	10.0	
C19-C20	130	50	10.0	
C21-C22	120	50	10.0	
C23-C24	240	50	10.0	
C25-C28	440	50	10.0	
C29-C32	520	50	10.0	
C33-C36	350	50	10.0	
C37-C40	230	50	10.0	
C41-C44	52	50	10.0	
C6-C44 Total	7100	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 8 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1311	**14-07-1870-8-A**	**07/28/14 10:47**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 06:30**	**140728B16**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	92	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1312	**14-07-1870-9-A**	**07/28/14 10:49**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 06:45**	**140728B16**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	ND	50	10.0	
C9-C10	340	50	10.0	
C11-C12	970	50	10.0	
C13-C14	1000	50	10.0	
C15-C16	ND	50	10.0	
C17-C18	64	50	10.0	
C19-C20	75	50	10.0	
C21-C22	97	50	10.0	
C23-C24	290	50	10.0	
C25-C28	580	50	10.0	
C29-C32	910	50	10.0	
C33-C36	540	50	10.0	
C37-C40	350	50	10.0	
C41-C44	110	50	10.0	
C6-C44 Total	5300	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 10 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-1046**	**N/A**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 01:17**	**140728B16**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-07-1804-2	**Sample**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 02:35**	**140728S16**
14-07-1804-2	**Matrix Spike**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 01:48**	**140728S16**
14-07-1804-2	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 02:04**	**140728S16**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	485.3	121	516.3	129	64-130	6	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/28/14
121 Innovation Drive, Suite 200		Work Order:	14-07-1870
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1046	**LCS**	**Solid**	**GC 48**	**07/28/14**	**07/29/14 01:32**	**140728B16**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	443.8	111	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-1870

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 48	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-1870

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31496

PROJECT NAME: Former Pentaway Car Plate			DATE: 7/28/14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L. Lowlan	LABORATORY ADDRESS:		14-07-1870
TURNAROUND TIME: 24-HR			
SAMPLE SHIPMENT METHOD: Cab Courier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8015 Chg Part	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7/28/14	1005	#1304	X	40z glass jar	S			X		1	
2		1006	#1305	X		S			X		1	
3		1037	#1306	X		S			X		1	
4		1038	#1307	X		S			X		1	
5		1042	#1308	X		S			X		1	
6		1044	#1309	X		S			X		1	
7		1046	#1310	X		S			X		1	
8		1047	#1311	X		S			X		1	
9		1049	#1312	X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: Stephen Hwang COMPANY: AMEC	7/28/14	1524	SIGNATURE: [signature] PRINTED NAME: Alex Marquez COMPANY: ECI	7/28/14	1524
SIGNATURE: [signature] PRINTED NAME: Alex Marquez COMPANY: ECI	7/28/14	1648	SIGNATURE: [signature] PRINTED NAME: DANNY LE COMPANY: E	7/28/14	16:45
SIGNATURE: PRINTED NAME: COMPANY:			SIGNATURE: PRINTED NAME: COMPANY:		

TOTAL NUMBER OF CONTAINERS: 9

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-07-1870

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/28/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.6 °C - 0.3 °C (CF) = 2.3 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 659

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 659

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 681

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 681

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WORK ORDER NUMBER: 14-07-2056

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 07/31/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate / 0106270030
Work Order Number: 14-07-2056

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Work Order Narrative

Work Order: 14-07-2056 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/30/14. They were assigned to Work Order 14-07-2056.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-2056
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	07/30/14 17:28
		Number of Containers:	11
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1322	14-07-2056-1	07/30/14 08:13	1	Solid
#1323	14-07-2056-2	07/30/14 08:14	1	Solid
#1322-14	14-07-2056-3	07/30/14 08:20	1	Solid
#1324	14-07-2056-4	07/30/14 08:30	1	Solid
#1324-17	14-07-2056-5	07/30/14 08:35	1	Solid
#1325	14-07-2056-6	07/30/14 08:55	1	Solid
#1326	14-07-2056-7	07/30/14 11:09	1	Solid
#1327	14-07-2056-8	07/30/14 11:10	1	Solid
#1328	14-07-2056-9	07/30/14 11:11	1	Solid
#1329	14-07-2056-10	07/30/14 11:14	1	Solid
#1330	14-07-2056-11	07/30/14 11:16	1	Solid

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1326	**14-07-2056-7-A**	**07/30/14 11:09**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 13:14**	**140731B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	15	5.0	1.00	
C11-C12	33	5.0	1.00	
C13-C14	34	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	8.3	5.0	1.00	
C19-C20	13	5.0	1.00	
C21-C22	11	5.0	1.00	
C23-C24	12	5.0	1.00	
C25-C28	23	5.0	1.00	
C29-C32	37	5.0	1.00	
C33-C36	43	5.0	1.00	
C37-C40	37	5.0	1.00	
C41-C44	24	5.0	1.00	
C6-C44 Total	290	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1327	**14-07-2056-8-A**	**07/30/14 11:10**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 15:05**	**140731B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	590	25	5.00	
C11-C12	1300	25	5.00	
C13-C14	1300	25	5.00	
C15-C16	230	25	5.00	
C17-C18	53	25	5.00	
C19-C20	49	25	5.00	
C21-C22	57	25	5.00	
C23-C24	81	25	5.00	
C25-C28	150	25	5.00	
C29-C32	240	25	5.00	
C33-C36	200	25	5.00	
C37-C40	140	25	5.00	
C41-C44	53	25	5.00	
C6-C44 Total	4500	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1328	**14-07-2056-9-A**	**07/30/14 11:11**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 13:46**	**140731B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1329	**14-07-2056-10-A**	**07/30/14 11:14**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 14:01**	**140731B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1330	**14-07-2056-11-A**	**07/30/14 11:16**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 14:17**	**140731B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	11	5.0	1.00	
C13-C14	43	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	6.7	5.0	1.00	
C19-C20	12	5.0	1.00	
C21-C22	20	5.0	1.00	
C23-C24	42	5.0	1.00	
C25-C28	98	5.0	1.00	
C29-C32	180	5.0	1.00	
C33-C36	88	5.0	1.00	
C37-C40	70	5.0	1.00	
C41-C44	39	5.0	1.00	
C6-C44 Total	620	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-1059**	**N/A**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 12:11**	**140731B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	91	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1330	**Sample**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 14:17**	**140731S01**
#1330	**Matrix Spike**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 12:42**	**140731S01**
#1330	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 12:58**	**140731S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	621.3	400.0	850.9	57	878.6	64	64-130	3	0-15	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1059	**LCS**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 12:26**	**140731B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	447.7	112	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-2056

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 48	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-2056

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31491

PROJECT NAME: Former Pentewer Cast Plate Facility

DATE: 7/30/14

PAGE 1 OF

PROJECT NUMBER: 01062-70030

RESULTS TO: L. Conlan

TURNAROUND TIME: 48HR / 24 HR (TPH)

SAMPLE SHIPMENT METHOD: Lab courier

LABORATORY NAME: CalScience

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

14-07-2056

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082 PCB	EPA 8015 TPH	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7/30/14	0813	#1322	X		4 oz glass jar	S		None	X		1	
2		0814	#1323	X			S			X		1	
3		0820	#1322-14	X			S			X		1	
4		0830	#1324	X			S			X		1	
5		0835	#1324-17	X			S			X		1	
6		0855	#1325	X			S			X		1	
7		1109	#1326		X		S			X		1	
8		1110	#1327		X		S			X		1	
9		1111	#1328		X		S			X		1	
10		1114	#1329		X		S			X		1	
11		1116	#1330		X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	7/30/14	1700	SIGNATURE: [signature]	7/30/14	1500
PRINTED NAME: Stephen Hwang			PRINTED NAME: Alex Marquez		
COMPANY: AMEC			COMPANY: ECI		
SIGNATURE: [signature]	7/30/14	1728	SIGNATURE: [signature]	7/30/14	17:28
PRINTED NAME: Alex Marquez			PRINTED NAME: DANNY LE		
COMPANY: ECI			COMPANY: ECI		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS: 24 HR TAT for TPH
48 HR TAT for PCB

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-07-2056

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/30/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 816

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 816

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Supplemental Report 1

WORK ORDER NUMBER: 14-07-2056

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 08/01/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-07-2056

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Work Order Narrative

Work Order: 14-07-2056 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/30/14. They were assigned to Work Order 14-07-2056.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-2056
		Project Name:	Former Pechiney Cast Plate / 0106270030
		PO Number:	
		Date/Time Received:	07/30/14 17:28
		Number of Containers:	11
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1322	14-07-2056-1	07/30/14 08:13	1	Solid
#1323	14-07-2056-2	07/30/14 08:14	1	Solid
#1322-14	14-07-2056-3	07/30/14 08:20	1	Solid
#1324	14-07-2056-4	07/30/14 08:30	1	Solid
#1324-17	14-07-2056-5	07/30/14 08:35	1	Solid
#1325	14-07-2056-6	07/30/14 08:55	1	Solid
#1326	14-07-2056-7	07/30/14 11:09	1	Solid
#1327	14-07-2056-8	07/30/14 11:10	1	Solid
#1328	14-07-2056-9	07/30/14 11:11	1	Solid
#1329	14-07-2056-10	07/30/14 11:14	1	Solid
#1330	14-07-2056-11	07/30/14 11:16	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-2056
		Project Name:	Former Pechiney Cast Plate / 0106270030
		Received:	07/30/14
Attn:	Linda Conlan		Page 1 of 2

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1322 (14-07-2056-1)						
Aroclor-1248	75000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	5300		500	ug/kg	EPA 8082	EPA 3540C
#1323 (14-07-2056-2)						
Aroclor-1248	45000		5000	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	2100		500	ug/kg	EPA 8082	EPA 3540C
#1322-14 (14-07-2056-3)						
Aroclor-1248	240		50	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	65		50	ug/kg	EPA 8082	EPA 3540C
#1324 (14-07-2056-4)						
Aroclor-1248	3000		500	ug/kg	EPA 8082	EPA 3540C
Aroclor-1260	250		50	ug/kg	EPA 8082	EPA 3540C
#1326 (14-07-2056-7)						
C9-C10	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	33		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	34		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	8.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	23		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	37		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	43		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	37		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	24		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	290		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-07-2056
		Project Name:	Former Pechiney Cast Plate / 0106270030
		Received:	07/30/14
Attn:	Linda Conlan		Page 2 of 2

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1327 (14-07-2056-8)						
C9-C10	590		25	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	1300		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	1300		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	230		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	53		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	49		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	57		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	81		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	150		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	240		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	200		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	140		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	53		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	4500		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1330 (14-07-2056-11)						
C11-C12	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	43		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	6.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	20		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	42		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	98		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	180		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	88		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	70		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	39		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	620		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1326	**14-07-2056-7-A**	**07/30/14 11:09**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 13:14**	**140731B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	15	5.0	1.00	
C11-C12	33	5.0	1.00	
C13-C14	34	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	8.3	5.0	1.00	
C19-C20	13	5.0	1.00	
C21-C22	11	5.0	1.00	
C23-C24	12	5.0	1.00	
C25-C28	23	5.0	1.00	
C29-C32	37	5.0	1.00	
C33-C36	43	5.0	1.00	
C37-C40	37	5.0	1.00	
C41-C44	24	5.0	1.00	
C6-C44 Total	290	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1327	**14-07-2056-8-A**	**07/30/14 11:10**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 15:05**	**140731B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	590	25	5.00	
C11-C12	1300	25	5.00	
C13-C14	1300	25	5.00	
C15-C16	230	25	5.00	
C17-C18	53	25	5.00	
C19-C20	49	25	5.00	
C21-C22	57	25	5.00	
C23-C24	81	25	5.00	
C25-C28	150	25	5.00	
C29-C32	240	25	5.00	
C33-C36	200	25	5.00	
C37-C40	140	25	5.00	
C41-C44	53	25	5.00	
C6-C44 Total	4500	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1328	**14-07-2056-9-A**	**07/30/14 11:11**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 13:46**	**140731B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1329	**14-07-2056-10-A**	**07/30/14 11:14**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 14:01**	**140731B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1330	**14-07-2056-11-A**	**07/30/14 11:16**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 14:17**	**140731B01**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	11	5.0	1.00	
C13-C14	43	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	6.7	5.0	1.00	
C19-C20	12	5.0	1.00	
C21-C22	20	5.0	1.00	
C23-C24	42	5.0	1.00	
C25-C28	98	5.0	1.00	
C29-C32	180	5.0	1.00	
C33-C36	88	5.0	1.00	
C37-C40	70	5.0	1.00	
C41-C44	39	5.0	1.00	
C6-C44 Total	620	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-1059**	**N/A**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 12:11**	**140731B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	91	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1322	**14-07-2056-1-A**	**07/30/14 08:13**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 16:05**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	5300	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	60-125	
2,4,5,6-Tetrachloro-m-Xylene	94	50-130	

#1322	**14-07-2056-1-A**	**07/30/14 08:13**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 17:03**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	75000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	160	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1323	**14-07-2056-2-A**	**07/30/14 08:14**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 16:25**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	500	10.0	
Aroclor-1221	ND	500	10.0	
Aroclor-1232	ND	500	10.0	
Aroclor-1242	ND	500	10.0	
Aroclor-1254	ND	500	10.0	
Aroclor-1260	2100	500	10.0	
Aroclor-1262	ND	500	10.0	
Aroclor-1268	ND	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	123	60-125	
2,4,5,6-Tetrachloro-m-Xylene	107	50-130	

#1323	**14-07-2056-2-A**	**07/30/14 08:14**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 17:22**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	45000	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	135	60-125	1,2,7
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1322-14	**14-07-2056-3-A**	**07/30/14 08:20**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 13:10**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	240	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	65	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	112	60-125	
2,4,5,6-Tetrachloro-m-Xylene	95	50-130	

#1324	**14-07-2056-4-A**	**07/30/14 08:30**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 13:29**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	250	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	107	60-125	
2,4,5,6-Tetrachloro-m-Xylene	111	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1324	**14-07-2056-4-A**	**07/30/14 08:30**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 16:44**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1248	3000	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	117	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1324-17	**14-07-2056-5-A**	**07/30/14 08:35**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 13:48**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: Former Pechiney Cast Plate / 0106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1325	**14-07-2056-6-A**	**07/30/14 08:55**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 14:12**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	110	60-125	
2,4,5,6-Tetrachloro-m-Xylene	110	50-130	

Method Blank	**099-02-003-294**	**N/A**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 11:35**	**140730L13**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	105	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1330	**Sample**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 14:17**	**140731S01**
#1330	**Matrix Spike**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 12:42**	**140731S01**
#1330	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 12:58**	**140731S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	621.3	400.0	850.9	57	878.6	64	64-130	3	0-15	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
#1324-17	**Sample**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 13:48**	**140730S13**
#1324-17	**Matrix Spike**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 15:08**	**140730S13**
#1324-17	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 15:27**	**140730S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	105.1	105	106.2	106	50-135	1	0-25	
Aroclor-1260	ND	100.0	109.1	109	110.8	111	50-135	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate / 0106270030			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1059	**LCS**	**Solid**	**GC 48**	**07/31/14**	**07/31/14 12:26**	**140731B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	447.7	112	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	07/30/14
121 Innovation Drive, Suite 200		Work Order:	14-07-2056
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: Former Pechiney Cast Plate / 0106270030			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-294	**LCS**	**Solid**	**GC 31**	**07/30/14**	**08/01/14 11:14**	**140730L13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	88.28	88	50-135	
Aroclor-1260	100.0	78.66	79	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-07-2056

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	847	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1

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Glossary of Terms and Qualifiers

Work Order: 14-07-2056

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 31491

PROJECT NAME: Former Pentfield Cast Plate Facility		DATE: 7/30/14	PAGE 1 OF
PROJECT NUMBER: 01062-70030	LABORATORY NAME: CalScience	CLIENT INFORMATION:	REPORTING REQUIREMENTS: 14-07-2056
RESULTS TO: Lincoln	LABORATORY ADDRESS:		
TURNAROUND TIME: 48HR / 24 HR (TAT)			
SAMPLE SHIPMENT METHOD: LaBlanier	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	EPA 8082 PCB	EPA 8015 TPH	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	7/30/14	0813	#1322	X		4 oz glass jar	S		None	X		1	
2		0814	#1323	X			S			X		1	
3		0820	#1322-14	X			S			X		1	
4		0830	#1324	X			S			X		1	
5		0835	#1324-17	X			S			X		1	
6		0855	#1325	X			S			X		1	
7		1109	#1326		X		S			X		1	
8		1110	#1327		X		S			X		1	
9		1111	#1328		X		S			X		1	
10		1114	#1329		X		S			X		1	
11		1116	#1330		X		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	7/30/14	1700	SIGNATURE:	7/30/14	1500
PRINTED NAME: Stephen Hwang			PRINTED NAME: Alex Marquez		
COMPANY: AMEC			COMPANY: ECI		
SIGNATURE:	7/30/14	1728	SIGNATURE:	7/30/14	17:28
PRINTED NAME: Alex Marquez			PRINTED NAME: DANNY LE		
COMPANY: ECI			COMPANY: ECI		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS: 24 HR TAT for TPH
48 HR TAT for PCB

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

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WORK ORDER #: 14-07-2056

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 07/30/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Checked by:** 678

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** 678

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 862

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 862

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 816

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 816

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WORK ORDER NUMBER: 14-09-0291

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Former Pechiney Cast Plate Facility / 0106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 09/05/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Former Pechiney Cast Plate Facility / 0106270030
Work Order Number: 14-09-0291

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Work Order Narrative

Work Order: 14-09-0291 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/04/14. They were assigned to Work Order 14-09-0291.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-09-0291
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		PO Number:	
		Date/Time Received:	09/04/14 17:47
		Number of Containers:	3
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
#1366	14-09-0291-1	09/04/14 15:15	1	Solid
#1367	14-09-0291-2	09/04/14 15:20	1	Solid
#1368	14-09-0291-3	09/04/14 15:22	1	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-09-0291
		Project Name:	Former Pechiney Cast Plate Facility / 0106270030
		Received:	09/04/14
Attn:	Linda Conlan		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
#1366 (14-09-0291-1)						
C19-C20	5.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	5.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	7.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	8.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	40		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
#1368 (14-09-0291-3)						
C9-C10	22		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	6.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	91		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/04/14
121 Innovation Drive, Suite 200		Work Order:	14-09-0291
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1366	**14-09-0291-1-A**	**09/04/14 15:15**	**Solid**	**GC 46**	**09/04/14**	**09/05/14 10:17**	**140904B04A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	5.6	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	5.5	5.0	1.00	
C29-C32	7.7	5.0	1.00	
C33-C36	8.0	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	40	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	61	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/04/14
121 Innovation Drive, Suite 200		Work Order:	14-09-0291
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1367	**14-09-0291-2-A**	**09/04/14 15:20**	**Solid**	**GC 46**	**09/04/14**	**09/05/14 10:35**	**140904B04A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	68	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/04/14
121 Innovation Drive, Suite 200		Work Order:	14-09-0291
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
#1368	**14-09-0291-3-A**	**09/04/14 15:22**	**Solid**	**GC 46**	**09/04/14**	**09/05/14 10:53**	**140904B04A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	22	5.0	1.00	
C11-C12	17	5.0	1.00	
C13-C14	17	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	6.3	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	91	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	73	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/04/14
121 Innovation Drive, Suite 200		Work Order:	14-09-0291
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-1121**	**N/A**	**Solid**	**GC 46**	**09/04/14**	**09/04/14 18:37**	**140904B04A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	09/04/14
121 Innovation Drive, Suite 200		Work Order:	14-09-0291
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-09-0165-1	**Sample**	**Solid**	**GC 46**	**09/04/14**	**09/04/14 20:06**	**140904S04**
14-09-0165-1	**Matrix Spike**	**Solid**	**GC 46**	**09/04/14**	**09/04/14 19:12**	**140904S04**
14-09-0165-1	**Matrix Spike Duplicate**	**Solid**	**GC 46**	**09/04/14**	**09/04/14 19:30**	**140904S04**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	424.9	106	435.9	109	55-133	3	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	09/04/14
121 Innovation Drive, Suite 200		Work Order:	14-09-0291
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Former Pechiney Cast Plate Facility / 0106270030			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1121	**LCS**	**Solid**	**GC 46**	**09/04/14**	**09/04/14 18:55**	**140904B04A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	368.6	92	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-09-0291

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	682	GC 46	1

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Glossary of Terms and Qualifiers

Work Order: 14-09-0291

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Costamagna, Daniel G [daniel.costamagna@amec.com]
Sent: Friday, September 05, 2014 7:49 AM
To: Stephen Nowak
Cc: Huang, Stephen
Subject: Pechiney - Sample number corrections

Steve,

For the samples picked up from the site yesterday (September 4, 2014), the numbering sequence is off.

Please make the following changes:

From #1364 to #1366
From #1365 to #1367
From #1366 to #1368

Thanks.

Stephen,

I have corrected our Sample Control Log and Field map accordingly.

Daniel

Daniel G. Costamagna, PG
Professional Geologist | Technical Professional 3
AMEC
Environment & Infrastructure Americas | West Group
121 Innovation Drive, Suite 200, Irvine, California 92617, USA
Tel 949.642.0245 | Fax 949.642.4474
Direct 949.574.7628 | Cell 714.873.7331
daniel.costamagna@amec.com
amec.com

Be more sustainable - think before you print this message

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CHAIN-OF-CUSTODY RECORD

NB 31552

PROJECT NAME: Former Pentobey Glass Plate Facility		DATE: 9/4/14	PAGE 1 OF 1
PROJECT NUMBER: 0W6270130	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		14-09-0291
TURNAROUND TIME: 24 HR			
SAMPLE SHIPMENT METHOD: Drop off	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES: TPH gas

	DATE	TIME	SAMPLE NUMBER	TPH gas	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	9/4/14	1515	#1364	Y	40z glass	S					1	
2	↓	1520	#1365	Y	↓	S					1	
3	↓	1522	#1366	Y	↓	S					1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	9/4/14	17:47	SIGNATURE: Danny Le	9/4/14	17:47
PRINTED NAME: Stephen Heavey			PRINTED NAME: DANNY LE		
COMPANY: AMEC			COMPANY: ECI		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 3

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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WORK ORDER #: 14-09-0291

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 09/04/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 4.1 °C - 0.3 °C (CF) = 3.8 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 659

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 659

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 836

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 659

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 659

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9765 Eton Avenue
Chatsworth
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Tel: (818) 998-5547
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October 03, 2013

Linda Conlan

AMEC Environment & Infrastructure, Inc.

121 Innovation Drive, Suite 200

Irvine, CA 92617

Re : Former Pechiney Cast Plate, Inc. / 0106270030

A844297 / 3I25007

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 09/25/13 15:10 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8082 PCBs					
43-V-R/R-SS-002	3I25007-01	Soil	2	09/25/13 09:50	09/25/13 15:10
43-V-R/R-SS-003	3I25007-02	Soil	2	09/25/13 09:55	09/25/13 15:10
43-V-R/R-SS-004	3I25007-03	Soil	2	09/25/13 10:00	09/25/13 15:10
43-V-R/R-SS-005	3I25007-04	Soil	2	09/25/13 10:05	09/25/13 15:10
43-V-R/R-SS-006	3I25007-05	Soil	2	09/25/13 10:10	09/25/13 15:10
43-V-R/R-SS-007	3I25007-06	Soil	2	09/25/13 10:15	09/25/13 15:10
43-V-R/R-SS-008	3I25007-07	Soil	2	09/25/13 10:20	09/25/13 15:10
43-V-R/R-SS-009	3I25007-08	Soil	2	09/25/13 10:25	09/25/13 15:10
43-V-R/R-SS-010	3I25007-09	Soil	2	09/25/13 10:30	09/25/13 15:10
43-V-R/R-SS-011	3I25007-10	Soil	2	09/25/13 10:35	09/25/13 15:10
43-V-R/R-SS-012	3I25007-11	Soil	2	09/25/13 10:40	09/25/13 15:10
43-V-R/R-SS-013	3I25007-12	Soil	2	09/25/13 10:45	09/25/13 15:10
43-V-R/R-SS-014	3I25007-13	Soil	2	09/25/13 10:50	09/25/13 15:10
43-V-R/R-SS-015	3I25007-14	Soil	2	09/25/13 10:55	09/25/13 15:10
CAM Metals Less Hg 6000/7000					
43-V-R/R-SS-002	3I25007-01	Soil	2	09/25/13 09:50	09/25/13 15:10
43-V-R/R-SS-003	3I25007-02	Soil	2	09/25/13 09:55	09/25/13 15:10
43-V-R/R-SS-004	3I25007-03	Soil	2	09/25/13 10:00	09/25/13 15:10

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
43-V-R/R-SS-005	3I25007-04	Soil	2	09/25/13 10:05	09/25/13 15:10
43-V-R/R-SS-006	3I25007-05	Soil	2	09/25/13 10:10	09/25/13 15:10
43-V-R/R-SS-007	3I25007-06	Soil	2	09/25/13 10:15	09/25/13 15:10
43-V-R/R-SS-008	3I25007-07	Soil	2	09/25/13 10:20	09/25/13 15:10
43-V-R/R-SS-009	3I25007-08	Soil	2	09/25/13 10:25	09/25/13 15:10
43-V-R/R-SS-010	3I25007-09	Soil	2	09/25/13 10:30	09/25/13 15:10
43-V-R/R-SS-011	3I25007-10	Soil	2	09/25/13 10:35	09/25/13 15:10
43-V-R/R-SS-012	3I25007-11	Soil	2	09/25/13 10:40	09/25/13 15:10
43-V-R/R-SS-013	3I25007-12	Soil	2	09/25/13 10:45	09/25/13 15:10
43-V-R/R-SS-014	3I25007-13	Soil	2	09/25/13 10:50	09/25/13 15:10
43-V-R/R-SS-015	3I25007-14	Soil	2	09/25/13 10:55	09/25/13 15:10
Carbon Chain Characterization 8015M					
43-V-R/R-SS-002	3I25007-01	Soil	2	09/25/13 09:50	09/25/13 15:10
43-V-R/R-SS-003	3I25007-02	Soil	2	09/25/13 09:55	09/25/13 15:10
43-V-R/R-SS-004	3I25007-03	Soil	2	09/25/13 10:00	09/25/13 15:10
43-V-R/R-SS-005	3I25007-04	Soil	2	09/25/13 10:05	09/25/13 15:10
43-V-R/R-SS-006	3I25007-05	Soil	2	09/25/13 10:10	09/25/13 15:10
43-V-R/R-SS-007	3I25007-06	Soil	2	09/25/13 10:15	09/25/13 15:10
43-V-R/R-SS-008	3I25007-07	Soil	2	09/25/13 10:20	09/25/13 15:10
43-V-R/R-SS-009	3I25007-08	Soil	2	09/25/13 10:25	09/25/13 15:10

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
43-V-R/R-SS-010	3I25007-09	Soil	2	09/25/13 10:30	09/25/13 15:10
43-V-R/R-SS-011	3I25007-10	Soil	2	09/25/13 10:35	09/25/13 15:10
43-V-R/R-SS-012	3I25007-11	Soil	2	09/25/13 10:40	09/25/13 15:10
43-V-R/R-SS-013	3I25007-12	Soil	2	09/25/13 10:45	09/25/13 15:10
43-V-R/R-SS-014	3I25007-13	Soil	2	09/25/13 10:50	09/25/13 15:10
43-V-R/R-SS-015	3I25007-14	Soil	2	09/25/13 10:55	09/25/13 15:10
Mercury Total EPA 7470A/7471A					
43-V-R/R-SS-002	3I25007-01	Soil	2	09/25/13 09:50	09/25/13 15:10
43-V-R/R-SS-003	3I25007-02	Soil	2	09/25/13 09:55	09/25/13 15:10
43-V-R/R-SS-004	3I25007-03	Soil	2	09/25/13 10:00	09/25/13 15:10
43-V-R/R-SS-005	3I25007-04	Soil	2	09/25/13 10:05	09/25/13 15:10
43-V-R/R-SS-006	3I25007-05	Soil	2	09/25/13 10:10	09/25/13 15:10
43-V-R/R-SS-007	3I25007-06	Soil	2	09/25/13 10:15	09/25/13 15:10
43-V-R/R-SS-008	3I25007-07	Soil	2	09/25/13 10:20	09/25/13 15:10
43-V-R/R-SS-009	3I25007-08	Soil	2	09/25/13 10:25	09/25/13 15:10
43-V-R/R-SS-010	3I25007-09	Soil	2	09/25/13 10:30	09/25/13 15:10
43-V-R/R-SS-011	3I25007-10	Soil	2	09/25/13 10:35	09/25/13 15:10
43-V-R/R-SS-012	3I25007-11	Soil	2	09/25/13 10:40	09/25/13 15:10
43-V-R/R-SS-013	3I25007-12	Soil	2	09/25/13 10:45	09/25/13 15:10
43-V-R/R-SS-014	3I25007-13	Soil	2	09/25/13 10:50	09/25/13 15:10

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
43-V-R/R-SS-015	3I25007-14	Soil	2	09/25/13 10:55	09/25/13 15:10

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: ug/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	09/26/13	09/26/13	09/26/13	09/26/13	
Date Analyzed:	09/26/13	09/26/13	09/26/13	09/26/13	
AA ID No:	3I25007-01	3I25007-02	3I25007-03	3I25007-04	
Client ID No:	43-V-R/R-SS-002	43-V-R/R-SS-003	43-V-R/R-SS-004	43-V-R/R-SS-005	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<20	<20	<20	<20	20
Aroclor-1221	<20	<20	<20	<20	20
Aroclor-1232	<20	<20	<20	<20	20
Aroclor-1242	<20	<20	<20	<20	20
Aroclor-1248	<20	<20	<20	<20	20
Aroclor-1254	<20	<20	<20	<20	20
Aroclor-1260	<20	<20	<20	<20	20
Aroclor-1268	<20	<20	<20	<20	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	140%	137%	139%	134%	50-150
Tetrachloro-meta-xylene	85%	89%	91%	80%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: ug/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	09/26/13	09/26/13	09/26/13	09/26/13	
Date Analyzed:	09/26/13	09/26/13	09/26/13	09/26/13	
AA ID No:	3I25007-05	3I25007-06	3I25007-07	3I25007-08	
Client ID No:	43-V-R/R-SS-006	43-V-R/R-SS-007	43-V-R/R-SS-008	43-V-R/R-SS-009	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<20	<20	<20	<20	20
Aroclor-1221	<20	<20	<20	<20	20
Aroclor-1232	<20	<20	<20	<20	20
Aroclor-1242	<20	<20	<20	<20	20
Aroclor-1248	<20	<20	<20	<20	20
Aroclor-1254	<20	<20	<20	<20	20
Aroclor-1260	<20	<20	<20	<20	20
Aroclor-1268	<20	<20	<20	<20	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	138%	136%	138%	138%	50-150
Tetrachloro-meta-xylene	86%	80%	89%	83%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: ug/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	09/26/13	09/26/13	09/26/13	09/26/13	
Date Analyzed:	09/26/13	09/26/13	09/26/13	09/26/13	
AA ID No:	3I25007-09	3I25007-10	3I25007-11	3I25007-12	
Client ID No:	43-V-R/R-SS-010	43-V-R/R-SS-011	43-V-R/R-SS-012	43-V-R/R-SS-013	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<20	<20	<20	<20	20
Aroclor-1221	<20	<20	<20	<20	20
Aroclor-1232	<20	<20	<20	<20	20
Aroclor-1242	<20	<20	<20	<20	20
Aroclor-1248	<20	<20	<20	<20	20
Aroclor-1254	<20	<20	<20	<20	20
Aroclor-1260	<20	<20	<20	<20	20
Aroclor-1268	<20	<20	<20	<20	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	138%	136%	140%	135%	50-150
Tetrachloro-meta-xylene	80%	82%	79%	76%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: ug/kg

Date Sampled:	09/25/13	09/25/13	
Date Prepared:	09/26/13	09/26/13	
Date Analyzed:	09/26/13	09/26/13	
AA ID No:	3I25007-13	3I25007-14	
Client ID No:	43-V-R/R-SS-014	43-V-R/R-SS-015	
Matrix:	Soil	Soil	
Dilution Factor:	1	1	MRL
8082 PCBs (EPA 8082)			
Aroclor-1016	<20	<20	20
Aroclor-1221	<20	<20	20
Aroclor-1232	<20	<20	20
Aroclor-1242	<20	<20	20
Aroclor-1248	<20	<20	20
Aroclor-1254	<20	<20	20
Aroclor-1260	<20	<20	20
Aroclor-1268	<20	<20	20
Surrogates			**%REC Limits**
Decachlorobiphenyl	137%	134%	50-150
Tetrachloro-meta-xylene	82%	78%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Carbon Chain by GC/FID

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	09/26/13	09/26/13	09/26/13	09/26/13	
Date Analyzed:	09/26/13	09/26/13	09/26/13	09/26/13	
AA ID No:	3I25007-01	3I25007-02	3I25007-03	3I25007-04	
Client ID No:	43-V-R/R-SS-002	43-V-R/R-SS-003	43-V-R/R-SS-004	43-V-R/R-SS-005	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Carbon Chain Characterization 8015M (EPA 8015M)					
C6-C8	<1.0	<1.0	<1.0	<1.0	1.0
C8-C10	<1.0	<1.0	<1.0	<1.0	1.0
C10-C12	<1.0	<1.0	<1.0	<1.0	1.0
C12-C14	<1.0	<1.0	<1.0	<1.0	1.0
C14-C16	<1.0	<1.0	<1.0	<1.0	1.0
C16-C18	<1.0	<1.0	<1.0	<1.0	1.0
C18-C20	<1.0	<1.0	<1.0	<1.0	1.0
C20-C22	<1.0	<1.0	<1.0	<1.0	1.0
C22-C24	<1.0	<1.0	<1.0	<1.0	1.0
C24-C26	<1.0	<1.0	<1.0	<1.0	1.0
C26-C28	<1.0	<1.0	<1.0	<1.0	1.0
C28-C32	<1.0	<1.0	<1.0	<1.0	1.0
C32-C34	<1.0	<1.0	<1.0	<1.0	1.0
C34-C36	<1.0	<1.0	<1.0	<1.0	1.0
C36-C40	<1.0	<1.0	<1.0	<1.0	1.0
C40-C44	<1.0	<1.0	<1.0	<1.0	1.0
TPH (C6-C44)	<10	<10	<10	<10	10
Surrogates					**%REC Limits**
o-Terphenyl	101%	95%	93%	104%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Carbon Chain by GC/FID

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	09/26/13	09/26/13	09/26/13	09/26/13	
Date Analyzed:	09/27/13	09/27/13	09/27/13	09/27/13	
AA ID No:	3I25007-05	3I25007-06	3I25007-07	3I25007-08	
Client ID No:	43-V-R/R-SS-006	43-V-R/R-SS-007	43-V-R/R-SS-008	43-V-R/R-SS-009	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Carbon Chain Characterization 8015M (EPA 8015M)					
C6-C8	<1.0	<1.0	<1.0	<1.0	1.0
C8-C10	<1.0	<1.0	<1.0	<1.0	1.0
C10-C12	<1.0	<1.0	<1.0	<1.0	1.0
C12-C14	<1.0	<1.0	<1.0	<1.0	1.0
C14-C16	<1.0	<1.0	<1.0	<1.0	1.0
C16-C18	<1.0	<1.0	<1.0	<1.0	1.0
C18-C20	<1.0	<1.0	<1.0	<1.0	1.0
C20-C22	<1.0	<1.0	<1.0	<1.0	1.0
C22-C24	<1.0	<1.0	<1.0	<1.0	1.0
C24-C26	<1.0	<1.0	<1.0	<1.0	1.0
C26-C28	<1.0	<1.0	<1.0	<1.0	1.0
C28-C32	<1.0	<1.0	<1.0	<1.0	1.0
C32-C34	<1.0	<1.0	<1.0	<1.0	1.0
C34-C36	<1.0	<1.0	<1.0	<1.0	1.0
C36-C40	<1.0	<1.0	<1.0	<1.0	1.0
C40-C44	<1.0	<1.0	<1.0	<1.0	1.0
TPH (C6-C44)	<10	<10	<10	<10	10
Surrogates					**%REC Limits**
o-Terphenyl	97%	98%	102%	97%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Carbon Chain by GC/FID

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	09/26/13	09/26/13	09/26/13	09/26/13	
Date Analyzed:	09/27/13	09/27/13	09/27/13	09/27/13	
AA ID No:	3I25007-09	3I25007-10	3I25007-11	3I25007-12	
Client ID No:	43-V-R/R-SS-010	43-V-R/R-SS-011	43-V-R/R-SS-012	43-V-R/R-SS-013	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Carbon Chain Characterization 8015M (EPA 8015M)					
C6-C8	<1.0	<1.0	<1.0	<1.0	1.0
C8-C10	<1.0	<1.0	<1.0	<1.0	1.0
C10-C12	<1.0	<1.0	<1.0	<1.0	1.0
C12-C14	<1.0	<1.0	<1.0	<1.0	1.0
C14-C16	<1.0	<1.0	<1.0	<1.0	1.0
C16-C18	<1.0	<1.0	<1.0	<1.0	1.0
C18-C20	<1.0	<1.0	<1.0	<1.0	1.0
C20-C22	<1.0	<1.0	<1.0	<1.0	1.0
C22-C24	<1.0	<1.0	<1.0	<1.0	1.0
C24-C26	<1.0	<1.0	<1.0	<1.0	1.0
C26-C28	<1.0	<1.0	<1.0	<1.0	1.0
C28-C32	<1.0	<1.0	<1.0	<1.0	1.0
C32-C34	<1.0	<1.0	<1.0	<1.0	1.0
C34-C36	<1.0	<1.0	<1.0	<1.0	1.0
C36-C40	<1.0	<1.0	<1.0	<1.0	1.0
C40-C44	<1.0	<1.0	<1.0	<1.0	1.0
TPH (C6-C44)	<10	<10	<10	<10	10
Surrogates					**%REC Limits**
o-Terphenyl	96%	89%	95%	90%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Carbon Chain by GC/FID

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	
Date Prepared:	09/26/13	09/26/13	
Date Analyzed:	09/27/13	09/27/13	
AA ID No:	3I25007-13	3I25007-14	
Client ID No:	43-V-R/R-SS-014	43-V-R/R-SS-015	
Matrix:	Soil	Soil	
Dilution Factor:	1	1	MRL
Carbon Chain Characterization 8015M (EPA 8015M)			
C6-C8	<1.0	<1.0	1.0
C8-C10	<1.0	<1.0	1.0
C10-C12	<1.0	<1.0	1.0
C12-C14	<1.0	<1.0	1.0
C14-C16	<1.0	<1.0	1.0
C16-C18	<1.0	<1.0	1.0
C18-C20	<1.0	<1.0	1.0
C20-C22	<1.0	<1.0	1.0
C22-C24	<1.0	<1.0	1.0
C24-C26	<1.0	<1.0	1.0
C26-C28	<1.0	<1.0	1.0
C28-C32	<1.0	<1.0	1.0
C32-C34	<1.0	<1.0	1.0
C34-C36	<1.0	<1.0	1.0
C36-C40	<1.0	<1.0	1.0
C40-C44	<1.0	<1.0	1.0
TPH (C6-C44)	<10	<10	10
Surrogates			**%REC Limits**
o-Terphenyl	88%	89%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	10/01/13	10/01/13	10/01/13	10/01/13	
Date Analyzed:	10/01/13	10/01/13	10/01/13	10/01/13	
AA ID No:	3I25007-01	3I25007-02	3I25007-03	3I25007-04	
Client ID No:	43-V-R/R-SS-002	43-V-R/R-SS-003	43-V-R/R-SS-004	43-V-R/R-SS-005	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)					
Antimony	<10	<10	<10	<10	10
Arsenic	**4.6**	**3.8**	**7.5**	**3.3**	0.50
Barium	**130**	**130**	**130**	**110**	10
Beryllium	<1.0	<1.0	<1.0	<1.0	1.0
Cadmium	**2.1**	**4.9**	**2.2**	**1.8**	1.0
Chromium	**18**	**17**	**18**	**14**	3.0
Cobalt	**10**	**9.4**	**10**	**8.5**	3.0
Copper	**27**	**30**	**26**	**15**	3.0
Lead	**11**	<3.0	**30**	<3.0	3.0
Molybdenum	<5.0	<5.0	<5.0	<5.0	5.0
Nickel	**13**	**15**	**13**	**10**	3.0
Selenium	<0.50	<0.50	<0.50	<0.50	0.50
Silver	<1.0	<1.0	<1.0	<1.0	1.0
Thallium	<5.0	<5.0	<5.0	<5.0	5.0
Vanadium	**45**	**42**	**43**	**38**	10
Zinc	**64**	**370**	**78**	**49**	3.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	10/01/13	10/01/13	10/01/13	10/01/13	
Date Analyzed:	10/01/13	10/01/13	10/01/13	10/01/13	
AA ID No:	3I25007-05	3I25007-06	3I25007-07	3I25007-08	
Client ID No:	43-V-R/R-SS-006	43-V-R/R-SS-007	43-V-R/R-SS-008	43-V-R/R-SS-009	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)					
Antimony	<10	<10	<10	<10	10
Arsenic	**2.1**	**3.0**	**2.2**	**3.1**	0.50
Barium	**120**	**110**	**110**	**120**	10
Beryllium	<1.0	<1.0	<1.0	<1.0	1.0
Cadmium	**2.0**	**1.8**	**2.5**	**2.0**	1.0
Chromium	**16**	**14**	**14**	**15**	3.0
Cobalt	**9.8**	**8.5**	**8.7**	**9.0**	3.0
Copper	**17**	**16**	**16**	**17**	3.0
Lead	<3.0	**3.0**	**5.7**	**6.4**	3.0
Molybdenum	<5.0	<5.0	<5.0	<5.0	5.0
Nickel	**12**	**10**	**10**	**11**	3.0
Selenium	<0.50	<0.50	<0.50	<0.50	0.50
Silver	<1.0	<1.0	<1.0	<1.0	1.0
Thallium	<5.0	<5.0	<5.0	<5.0	5.0
Vanadium	**43**	**37**	**37**	**41**	10
Zinc	**56**	**50**	**270**	**62**	3.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	10/01/13	10/01/13	10/01/13	10/01/13	
Date Analyzed:	10/01/13	10/01/13	10/01/13	10/01/13	
AA ID No:	3I25007-09	3I25007-10	3I25007-11	3I25007-12	
Client ID No:	43-V-R/R-SS-010	43-V-R/R-SS-011	43-V-R/R-SS-012	43-V-R/R-SS-013	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)					
Antimony	<10	<10	<10	<10	10
Arsenic	**4.3**	**2.8**	**5.3**	**1.7**	0.50
Barium	**100**	**120**	**100**	**110**	10
Beryllium	<1.0	<1.0	<1.0	<1.0	1.0
Cadmium	**1.8**	**1.9**	**1.8**	**1.8**	1.0
Chromium	**13**	**15**	**13**	**14**	3.0
Cobalt	**7.9**	**9.2**	**7.6**	**8.5**	3.0
Copper	**16**	**16**	**16**	**15**	3.0
Lead	**22**	<3.0	**22**	<3.0	3.0
Molybdenum	<5.0	<5.0	<5.0	<5.0	5.0
Nickel	**9.4**	**11**	**9.3**	**10**	3.0
Selenium	<0.50	<0.50	<0.50	<0.50	0.50
Silver	<1.0	<1.0	<1.0	<1.0	1.0
Thallium	<5.0	<5.0	<5.0	<5.0	5.0
Vanadium	**35**	**41**	**37**	**38**	10
Zinc	**66**	**53**	**71**	**48**	3.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	
Date Prepared:	10/01/13	10/01/13	
Date Analyzed:	10/01/13	10/01/13	
AA ID No:	3I25007-13	3I25007-14	
Client ID No:	43-V-R/R-SS-014	43-V-R/R-SS-015	
Matrix:	Soil	Soil	
Dilution Factor:	1	1	MRL
CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)			
Antimony	<10	<10	10
Arsenic	**4.5**	**1.9**	0.50
Barium	**110**	**110**	10
Beryllium	<1.0	<1.0	1.0
Cadmium	**1.8**	**1.8**	1.0
Chromium	**14**	**14**	3.0
Cobalt	**8.2**	**8.5**	3.0
Copper	**21**	**15**	3.0
Lead	**16**	<3.0	3.0
Molybdenum	<5.0	<5.0	5.0
Nickel	**10**	**10**	3.0
Selenium	<0.50	<0.50	0.50
Silver	<1.0	<1.0	1.0
Thallium	<5.0	<5.0	5.0
Vanadium	**38**	**38**	10
Zinc	**72**	**49**	3.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	10/02/13	10/02/13	10/02/13	10/02/13	
Date Analyzed:	10/02/13	10/02/13	10/02/13	10/02/13	
AA ID No:	3I25007-01	3I25007-02	3I25007-03	3I25007-04	
Client ID No:	43-V-R/R-SS-002	43-V-R/R-SS-003	43-V-R/R-SS-004	43-V-R/R-SS-005	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Mercury Total EPA 7470A/7471A (EPA 7471A)					
Mercury	**0.084**	**0.046**	**0.052**	**0.032**	0.020

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	10/02/13	10/02/13	10/02/13	10/02/13	
Date Analyzed:	10/02/13	10/02/13	10/02/13	10/02/13	
AA ID No:	3I25007-05	3I25007-06	3I25007-07	3I25007-08	
Client ID No:	43-V-R/R-SS-006	43-V-R/R-SS-007	43-V-R/R-SS-008	43-V-R/R-SS-009	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Mercury Total EPA 7470A/7471A (EPA 7471A)					
Mercury	**0.028**	**0.034**	**0.040**	**0.040**	0.020

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	09/25/13	09/25/13	
Date Prepared:	10/02/13	10/02/13	10/02/13	10/02/13	
Date Analyzed:	10/02/13	10/02/13	10/02/13	10/02/13	
AA ID No:	3I25007-09	3I25007-10	3I25007-11	3I25007-12	
Client ID No:	43-V-R/R-SS-010	43-V-R/R-SS-011	43-V-R/R-SS-012	43-V-R/R-SS-013	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Mercury Total EPA 7470A/7471A (EPA 7471A)					
Mercury	**0.032**	**0.035**	**0.044**	**0.036**	0.020

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13
Units: mg/kg

Date Sampled:	09/25/13	09/25/13	
Date Prepared:	10/02/13	10/02/13	
Date Analyzed:	10/02/13	10/02/13	
AA ID No:	3I25007-13	3I25007-14	
Client ID No:	43-V-R/R-SS-014	43-V-R/R-SS-015	
Matrix:	Soil	Soil	
Dilution Factor:	1	1	MRL
Mercury Total EPA 7470A/7471A (EPA 7471A)			
Mercury	**0.043**	**0.044**	0.020

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B3I2601 - EPA 3550B										
Blank (B3I2601-BLK1)				Prepared & Analyzed: 09/26/13						
Aroclor-1016	<10	10	ug/kg							
Aroclor-1221	<10	10	ug/kg							
Aroclor-1232	<10	10	ug/kg							
Aroclor-1242	<10	10	ug/kg							
Aroclor-1248	<10	10	ug/kg							
Aroclor-1254	<10	10	ug/kg							
Aroclor-1260	<10	10	ug/kg							
Aroclor-1268	<10	10	ug/kg							
Surrogate: Decachlorobiphenyl	*3.38*		*ug/kg*	*2.5*		*135*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*2.07*		*ug/kg*	*2.5*		*82.8*	*50-150*			
LCS (B3I2601-BS1)				Prepared & Analyzed: 09/26/13						
Aroclor-1016	**23.0**	10	ug/kg	25		92.0	60-140		40	
Aroclor-1260	**24.7**	10	ug/kg	25		98.8	60-140		40	
Surrogate: Decachlorobiphenyl	*3.46*		*ug/kg*	*2.5*		*139*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*1.45*		*ug/kg*	*2.5*		*58.1*	*50-150*			
LCS Dup (B3I2601-BSD1)				Prepared & Analyzed: 09/26/13						
Aroclor-1016	**23.6**	10	ug/kg	25		94.4	60-140	2.58	40	
Aroclor-1260	**24.8**	10	ug/kg	25		99.4	60-140	0.605	40	
Surrogate: Decachlorobiphenyl	*3.44*		*ug/kg*	*2.5*		*138*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*1.31*		*ug/kg*	*2.5*		*52.5*	*50-150*			
Matrix Spike (B3I2601-MS1)		**Source: 3I25007-01**		Prepared & Analyzed: 09/26/13						
Aroclor-1016	**48.1**	20	ug/kg	50	<20	96.2	50-150		40	
Aroclor-1260	**52.3**	20	ug/kg	50	<20	105	50-150		40	
Surrogate: Decachlorobiphenyl	*6.79*		*ug/kg*	*5.0*		*136*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*3.87*		*ug/kg*	*5.0*		*77.5*	*50-150*			
Matrix Spike Dup (B3I2601-MSD1)		**Source: 3I25007-01**		Prepared & Analyzed: 09/26/13						
Aroclor-1016	**44.9**	20	ug/kg	50	<20	89.8	50-150	6.88	40	
Aroclor-1260	**51.8**	20	ug/kg	50	<20	104	50-150	0.961	40	
Surrogate: Decachlorobiphenyl	*6.53*		*ug/kg*	*5.0*		*131*	*50-150*			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B3I2601 - EPA 3550B										
Matrix Spike Dup (B3I2601-MSD1) Continued			**Source: 3I25007-01**	Prepared & Analyzed: 09/26/13						
Surrogate: Tetrachloro-meta-xylene	*3.94*		*ug/kg*	*5.0*		*78.9*	*50-150*			
Carbon Chain by GC/FID - Quality Control										
Batch B3I2615 - EPA 3550B										
Blank (B3I2615-BLK1)				Prepared & Analyzed: 09/26/13						
C6-C8	<1.0	1.0	mg/kg							
C8-C10	<1.0	1.0	mg/kg							
C10-C12	<1.0	1.0	mg/kg							
C12-C14	<1.0	1.0	mg/kg							
C14-C16	<1.0	1.0	mg/kg							
C16-C18	<1.0	1.0	mg/kg							
C18-C20	<1.0	1.0	mg/kg							
C20-C22	<1.0	1.0	mg/kg							
C22-C24	<1.0	1.0	mg/kg							
C24-C26	<1.0	1.0	mg/kg							
C26-C28	<1.0	1.0	mg/kg							
C28-C32	<1.0	1.0	mg/kg							
C32-C34	<1.0	1.0	mg/kg							
C34-C36	<1.0	1.0	mg/kg							
C36-C40	<1.0	1.0	mg/kg							
C40-C44	<1.0	1.0	mg/kg							
TPH (C6-C44)	<10	10	mg/kg							
Surrogate: o-Terphenyl	*9.50*		*mg/kg*	*10*		*95.0*	*50-150*			
LCS (B3I2615-BS1)				Prepared & Analyzed: 09/26/13						
Diesel Range Organics as Diesel	**195**	10	mg/kg	200		97.4	75-125		40	
Surrogate: o-Terphenyl	*12.4*		*mg/kg*	*10*		*124*	*50-150*			
LCS Dup (B3I2615-BSD1)				Prepared & Analyzed: 09/26/13						
Diesel Range Organics as Diesel	**216**	10	mg/kg	200		108	75-125	10.2	40	
Surrogate: o-Terphenyl	*13.7*		*mg/kg*	*10*		*137*	*50-150*			
Matrix Spike (B3I2615-MS1)			**Source: 3I25002-01**	Prepared & Analyzed: 09/26/13						

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon Chain by GC/FID - Quality Control										
Batch B3I2615 - EPA 3550B										
Matrix Spike (B3I2615-MS1) Continued		**Source: 3I25002-01**		Prepared & Analyzed: 09/26/13						
Diesel Range Organics as Diesel	**236**	10	mg/kg	200	18.0	109	70-130		40	
Surrogate: o-Terphenyl	*13.8*		*mg/kg*	*10*		*138*	*50-150*			
Matrix Spike Dup (B3I2615-MSD1)		**Source: 3I25002-01**		Prepared & Analyzed: 09/26/13						
Diesel Range Organics as Diesel	**233**	10	mg/kg	200	18.0	108	70-130	1.28	40	
Surrogate: o-Terphenyl	*13.5*		*mg/kg*	*10*		*135*	*50-150*			
Total Metals CAM 17 - Quality Control										
Batch B3J0112 - EPA 3050B										
Blank (B3J0112-BLK1)				Prepared & Analyzed: 10/01/13						
Antimony	<10	10	mg/kg							
Arsenic	<0.50	0.50	mg/kg							
Barium	<10	10	mg/kg							
Beryllium	<1.0	1.0	mg/kg							
Cadmium	<1.0	1.0	mg/kg							
Chromium	<3.0	3.0	mg/kg							
Cobalt	<3.0	3.0	mg/kg							
Copper	<3.0	3.0	mg/kg							
Lead	<3.0	3.0	mg/kg							
Molybdenum	<5.0	5.0	mg/kg							
Nickel	<3.0	3.0	mg/kg							
Selenium	<0.50	0.50	mg/kg							
Silver	<1.0	1.0	mg/kg							
Thallium	<5.0	5.0	mg/kg							
Vanadium	<10	10	mg/kg							
Zinc	<3.0	3.0	mg/kg							
LCS (B3J0112-BS1)				Prepared & Analyzed: 10/01/13						
Antimony	**44.5**	10	mg/kg	50		88.9	80-120			
Arsenic	**49.6**	0.50	mg/kg	50		99.1	80-120			
Barium	**50.2**	10	mg/kg	50		100	80-120			
Beryllium	**48.8**	1.0	mg/kg	50		97.7	80-120			
Cadmium	**50.0**	1.0	mg/kg	50		99.9	80-120			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B3J0112 - EPA 3050B										
LCS (B3J0112-BS1) Continued				Prepared & Analyzed: 10/01/13						
Chromium	**49.7**	3.0	mg/kg	50		99.4	80-120			
Cobalt	**50.8**	3.0	mg/kg	50		102	80-120			
Copper	**50.2**	3.0	mg/kg	50		100	80-120			
Lead	**50.6**	3.0	mg/kg	50		101	80-120			
Molybdenum	**49.8**	5.0	mg/kg	50		99.6	80-120			
Nickel	**51.0**	3.0	mg/kg	50		102	80-120			
Selenium	**50.3**	0.50	mg/kg	50		101	80-120			
Silver	**49.8**	1.0	mg/kg	50		99.6	80-120			
Thallium	**55.5**	5.0	mg/kg	50		111	80-120			
Vanadium	**49.8**	10	mg/kg	50		99.6	80-120			
Zinc	**50.1**	3.0	mg/kg	50		100	80-120			
LCS Dup (B3J0112-BSD1)				Prepared & Analyzed: 10/01/13						
Antimony	**44.8**	10	mg/kg	50		89.6	80-120	0.829	20	
Arsenic	**50.1**	0.50	mg/kg	50		100	80-120	1.09	20	
Barium	**49.6**	10	mg/kg	50		99.3	80-120	1.12	20	
Beryllium	**48.7**	1.0	mg/kg	50		97.4	80-120	0.215	20	
Cadmium	**50.1**	1.0	mg/kg	50		100	80-120	0.260	20	
Chromium	**50.0**	3.0	mg/kg	50		100	80-120	0.552	20	
Cobalt	**51.2**	3.0	mg/kg	50		102	80-120	0.588	20	
Copper	**50.2**	3.0	mg/kg	50		100	80-120	0.0996	20	
Lead	**51.0**	3.0	mg/kg	50		102	80-120	0.787	20	
Molybdenum	**50.6**	5.0	mg/kg	50		101	80-120	1.45	20	
Nickel	**50.7**	3.0	mg/kg	50		101	80-120	0.492	20	
Selenium	**50.2**	0.50	mg/kg	50		100	80-120	0.199	20	
Silver	**49.3**	1.0	mg/kg	50		98.7	80-120	0.938	20	
Thallium	**55.0**	5.0	mg/kg	50		110	80-120	0.814	20	
Vanadium	**50.2**	10	mg/kg	50		100	80-120	0.660	20	
Zinc	**51.8**	3.0	mg/kg	50		104	80-120	3.34	20	
Duplicate (B3J0112-DUP1)		**Source: 3I25007-14**		Prepared & Analyzed: 10/01/13						
Antimony	**<10**	10	mg/kg		<10				40	
Arsenic	**1.86**	0.50	mg/kg		1.93			3.43	40	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B3J0112 - EPA 3050B										
Duplicate (B3J0112-DUP1) Continued		**Source: 3I25007-14**	Prepared & Analyzed: 10/01/13							
Barium	**111**	10	mg/kg		109			1.95	40	
Beryllium	**<1.0**	1.0	mg/kg		<1.0				40	
Cadmium	**1.75**	1.0	mg/kg		1.78			1.42	40	
Chromium	**13.7**	3.0	mg/kg		14.0			2.24	40	
Cobalt	**8.30**	3.0	mg/kg		8.47			1.97	40	
Copper	**15.2**	3.0	mg/kg		15.2			0.361	40	
Lead	**<3.0**	3.0	mg/kg		<3.0				40	
Molybdenum	**<5.0**	5.0	mg/kg		<5.0				40	
Nickel	**10.0**	3.0	mg/kg		9.95			0.551	40	
Selenium	**<0.50**	0.50	mg/kg		<0.50				40	
Silver	**<1.0**	1.0	mg/kg		<1.0				40	
Thallium	**<5.0**	5.0	mg/kg		<5.0				40	
Vanadium	**37.4**	10	mg/kg		38.0			1.76	40	
Zinc	**49.4**	3.0	mg/kg		48.8			1.37	40	
Matrix Spike (B3J0112-MS1)		**Source: 3I25007-08**	Prepared & Analyzed: 10/01/13							
Antimony	**43.1**	10	mg/kg	50	<10	86.2	75-125			
Arsenic	**54.8**	0.50	mg/kg	50	3.14	103	75-125			
Barium	**170**	10	mg/kg	50	117	106	75-125			
Beryllium	**47.8**	1.0	mg/kg	50	<1.0	95.7	75-125			
Cadmium	**53.0**	1.0	mg/kg	50	1.96	102	75-125			
Chromium	**68.0**	3.0	mg/kg	50	15.2	106	75-125			
Cobalt	**62.2**	3.0	mg/kg	50	9.00	106	75-125			
Copper	**67.8**	3.0	mg/kg	50	16.7	102	75-125			
Lead	**59.0**	3.0	mg/kg	50	6.44	105	75-125			
Molybdenum	**51.6**	5.0	mg/kg	50	<5.0	103	75-125			
Nickel	**63.8**	3.0	mg/kg	50	11.3	105	75-125			
Selenium	**46.4**	0.50	mg/kg	50	<0.50	92.7	75-125			
Silver	**49.3**	1.0	mg/kg	50	<1.0	98.6	75-125			
Thallium	**19.3**	5.0	mg/kg	50	<5.0	38.5	60-140			QM-07
Vanadium	**93.3**	10	mg/kg	50	40.6	105	75-125			
Zinc	**114**	3.0	mg/kg	50	61.5	104	75-125			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844297
Date Received: 09/25/13
Date Reported: 10/03/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B3J0112 - EPA 3050B										
Matrix Spike Dup (B3J0112-MSD1)		**Source: 3I25007-08**		Prepared & Analyzed: 10/01/13						
Antimony	**44.2**	10	mg/kg	50	<10	88.4	75-125	2.54	40	
Arsenic	**54.6**	0.50	mg/kg	50	3.14	103	75-125	0.274	40	
Barium	**171**	10	mg/kg	50	117	109	75-125	0.909	40	
Beryllium	**47.3**	1.0	mg/kg	50	<1.0	94.6	75-125	1.07	40	
Cadmium	**52.7**	1.0	mg/kg	50	1.96	101	75-125	0.568	40	
Chromium	**67.8**	3.0	mg/kg	50	15.2	105	75-125	0.147	40	
Cobalt	**62.0**	3.0	mg/kg	50	9.00	106	75-125	0.161	40	
Copper	**67.8**	3.0	mg/kg	50	16.7	102	75-125	0.147	40	
Lead	**58.8**	3.0	mg/kg	50	6.44	105	75-125	0.255	40	
Molybdenum	**52.0**	5.0	mg/kg	50	<5.0	104	75-125	0.869	40	
Nickel	**63.2**	3.0	mg/kg	50	11.3	104	75-125	0.787	40	
Selenium	**46.1**	0.50	mg/kg	50	<0.50	92.2	75-125	0.606	40	
Silver	**49.1**	1.0	mg/kg	50	<1.0	98.1	75-125	0.539	40	
Thallium	**47.3**	5.0	mg/kg	50	<5.0	94.6	60-140	84.2	40	
Vanadium	**93.0**	10	mg/kg	50	40.6	105	75-125	0.268	40	
Zinc	**116**	3.0	mg/kg	50	61.5	110	75-125	2.48	40	
Total Metals CAM 17 - Quality Control										
Batch B3J0208 - EPA 7471A Prep										
Blank (B3J0208-BLK1)				Prepared & Analyzed: 10/02/13						
Mercury	<0.020	0.020	mg/kg							
LCS (B3J0208-BS1)				Prepared & Analyzed: 10/02/13						
Mercury	**0.493**	0.020	mg/kg	0.50		98.6	80-120			
LCS Dup (B3J0208-BSD1)				Prepared & Analyzed: 10/02/13						
Mercury	**0.506**	0.020	mg/kg	0.50		101	80-120	2.60	25	
Matrix Spike (B3J0208-MS1)		**Source: 3I25007-08**		Prepared & Analyzed: 10/02/13						
Mercury	**0.578**	0.020	mg/kg	0.50	0.0405	108	75-125			
Matrix Spike Dup (B3J0208-MSD1)		**Source: 3I25007-08**		Prepared & Analyzed: 10/02/13						
Mercury	**0.536**	0.020	mg/kg	0.50	0.0405	99.2	75-125	7.45	25	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844297
Project No:	0106270030	**Date Received:**	09/25/13
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	10/03/13

Special Notes

[1] = **QM-07** : The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Viorel Vasile
Operations Manager

CHAIN-OF-CUSTODY RECORD A844297 / 3I25007 118133 NB 27601

PROJECT NAME: Former Pechiney Cast Plate Facility

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HOUR

SAMPLE SHIPMENT METHOD: courier

LABORATORY NAME: ~~[illegible]~~

LABORATORY ADDRESS: American Analytics Vionle

LABORATORY CONTACT: ~~Steve [illegible]~~

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC Irvine Office (949) 642-0245

DATE: 9-25-13 PAGE 1 OF 1

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Hollandsworth

ANALYSES

DATE	TIME	SAMPLE NUMBER	PCBs-8082	TPH-8015	6 Cam Metals	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
9-25-13	0950	43-V-R/R-SS-002	X	X	X	4oz glass jar	S		None	X		1	3I25007-01
	0955	43-V-R/R-SS-003	X	X	X	4oz glass jar	S			X		1	-02
	1000	43-V-R/R-SS-004	X	X	X	4oz glass jar	S			X		1	-03
	1005	43-V-R/R-SS-005	X	X	X		S			X		1	-04
	1010	43-V-R/R-SS-006	X	X	X		S			X		1	-05
	1015	43-V-R/R-SS-007	X	X	X		S			X		1	-06
	1020	43-V-R/R-SS-008	X	X	X		S			X		1	-07
	1025	43-V-R/R-SS-009	X	X	X		S			X		1	-08
	1030	43-V-R/R-SS-010	X	X	X		S			X		1	-09
	1035	43-V-R/R-SS-011	X	X	X		S			X		1	-10
	1040	43-V-R/R-SS-012	X	X	X		S			X		1	-11
	1045	43-V-R/R-SS-013	X	X	X		S			X		1	-12
	1050	43-V-R/R-SS-014	X	X	X		S			X		1	-13
	1055	43-V-R/R-SS-015	X	X	X		S			X		1	-14

Kshc

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Hollandsworth	9/25/13	1400	SIGNATURE:	9/25/13	1400
PRINTED NAME: Kimberly Holland-Chominsky			PRINTED NAME: Stephen Hunter		
COMPANY: AMEC			COMPANY: AMEC		
SIGNATURE:	9/25/13	1420	SIGNATURE:	9/25/13	1420
PRINTED NAME: Stephen Hunter			PRINTED NAME: Gustavo Lopez		
COMPANY: AMEC			COMPANY: American A		
SIGNATURE:	9/25/13	1500	SIGNATURE:	9/25/13	1500
PRINTED NAME: Gustavo L.			PRINTED NAME: Victor Ayres		
COMPANY:			COMPANY: AA		

TOTAL NUMBER OF CONTAINERS: 14 Kshc

SAMPLING COMMENTS:

PRIORITY 48 Hrs Rush: 9/25/13 Time 1600 Sign SH

(*) added on 10/1/13, per L. Conlan, 48 hr Rush

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

9765 Eton Avenue
Chatsworth
California 91311
Tel: (818) 998-5547
Fax: (818) 998-7258

February 28, 2014

Linda Conlan

AMEC Environment & Infrastructure, Inc.

121 Innovation Drive, Suite 200

Irvine, CA 92617

Re : Former Pechiney Cast Plate, Inc. / 0106270030

A844369 / 4B26004

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 02/26/14 15:30 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8082 PCBs					
574-IIIA-P/S-O-001	4B26004-01	Solid	2	02/26/14 10:55	02/26/14 15:30
565-IV-O-CS-001	4B26004-02	Concrete	2	02/26/14 11:11	02/26/14 15:30
565-IV-O-CS-002	4B26004-03	Concrete	2	02/26/14 11:18	02/26/14 15:30
565-IV-O-CS-003	4B26004-04	Concrete	2	02/26/14 11:25	02/26/14 15:30
565-IV-O-CS-004	4B26004-05	Concrete	2	02/26/14 11:30	02/26/14 15:30
142-I-P/S-O-001	4B26004-06	Solid	2	02/26/14 13:15	02/26/14 15:30
142-I-P/S-O-002	4B26004-07	Solid	2	02/26/14 13:20	02/26/14 15:30
8260B					
574-IIIA-P/S-O-001	4B26004-01	Solid	2	02/26/14 10:55	02/26/14 15:30
CAM Metals Less Hg 6000/7000					
574-IIIA-P/S-O-001	4B26004-01	Solid	2	02/26/14 10:55	02/26/14 15:30
Carbon Chain Characterization 8015M					
574-IIIA-P/S-O-001	4B26004-01	Solid	2	02/26/14 10:55	02/26/14 15:30
Mercury Total EPA 7470A/7471A					
574-IIIA-P/S-O-001	4B26004-01	Solid	2	02/26/14 10:55	02/26/14 15:30

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14
Units: ug/kg

Date Sampled:	02/26/14	02/26/14	02/26/14	02/26/14	
Date Prepared:	02/27/14	02/27/14	02/27/14	02/27/14	
Date Analyzed:	02/27/14	02/27/14	02/27/14	02/27/14	
AA ID No:	4B26004-01	4B26004-02	4B26004-03	4B26004-04	
Client ID No:	574-IIIA-P/S-O-001	565-IV-O-CS-001	565-IV-O-CS-002	565-IV-O-CS-003	
Matrix:	Solid	Concrete	Concrete	Concrete	
Dilution Factor:	5	5	5	5	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<100	<100	<100	<100	20
Aroclor-1221	<100	<100	<100	<100	20
Aroclor-1232	<100	<100	<100	<100	20
Aroclor-1242	<100	<100	<100	<100	20
Aroclor-1248	**670**	<100	<100	**160**	20
Aroclor-1254	**990**	<100	<100	**150**	20
Aroclor-1260	<1000 [1]	<100	<100	<100	20
Aroclor-1268	**7600**	<100	<100	<100	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	0.0 [2]	87%	93%	98%	50-150
Tetrachloro-meta-xylene	102%	123%	71%	73%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14
Units: ug/kg

Date Sampled:	02/26/14	02/26/14	02/26/14	
Date Prepared:	02/27/14	02/27/14	02/27/14	
Date Analyzed:	02/27/14	02/27/14	02/27/14	
AA ID No:	4B26004-05	4B26004-06	4B26004-07	
Client ID No:	565-IV-O-CS-004	142-I-P/S-O-001	142-I-P/S-O-002	
Matrix:	Concrete	Solid	Solid	
Dilution Factor:	5	5	5	MRL
8082 PCBs (EPA 8082)				
Aroclor-1016	<100	<100	<100	20
Aroclor-1221	<100	<100	<100	20
Aroclor-1232	<100	<100	<100	20
Aroclor-1242	<100	<100	<100	20
Aroclor-1248	<100	<100	<100	20
Aroclor-1254	<100	<100	<100	20
Aroclor-1260	<100	<100	<100	20
Aroclor-1268	<100	<100	<100	20
Surrogates				**%REC Limits**
Decachlorobiphenyl	92%	96%	94%	50-150
Tetrachloro-meta-xylene	84%	83%	88%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844369
Project No:	0106270030	**Date Received:**	02/26/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	02/28/14
Method:	VOCs by GC/MS	**Units:**	ug/kg

Date Sampled:	02/26/14	
Date Prepared:	02/26/14	
Date Analyzed:	02/27/14	
AA ID No:	4B26004-01	
Client ID No:	574-IIIA-P/S-O-00 1	
Matrix:	Solid	
Dilution Factor:	1	MRL

8260B (EPA 8260B)

Acetone	<50	50
Benzene	<2.0	2.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<5.0	5.0
Bromodichloromethane	<5.0	5.0
Bromoform	<5.0	5.0
Bromomethane	<5.0	5.0
2-Butanone (MEK)	<50	50
sec-Butylbenzene	<5.0	5.0
n-Butylbenzene	<5.0	5.0
tert-Butylbenzene	<5.0	5.0
Carbon Disulfide	<5.0	5.0
Carbon Tetrachloride	<5.0	5.0
Chlorobenzene	<5.0	5.0
Chloroethane	<5.0	5.0
Chloroform	<5.0	5.0
Chloromethane	<5.0	5.0
4-Chlorotoluene	<5.0	5.0
2-Chlorotoluene	<5.0	5.0
1,2-Dibromo-3-chloropropane	<10	10
Dibromochloromethane	<5.0	5.0
1,2-Dibromoethane (EDB)	<5.0	5.0
Dibromomethane	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,2-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844369
Project No:	0106270030	**Date Received:**	02/26/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	02/28/14
Method:	VOCs by GC/MS	**Units:**	ug/kg

Date Sampled:	02/26/14	
Date Prepared:	02/26/14	
Date Analyzed:	02/27/14	
AA ID No:	4B26004-01	
Client ID No:	574-IIIA-P/S-O-00 1	
Matrix:	Solid	
Dilution Factor:	1	MRL

8260B (EPA 8260B) (continued)

Dichlorodifluoromethane (R12)	<5.0	5.0
1,1-Dichloroethane	<5.0	5.0
1,2-Dichloroethane (EDC)	<5.0	5.0
1,1-Dichloroethylene	<5.0	5.0
trans-1,2-Dichloroethylene	<5.0	5.0
cis-1,2-Dichloroethylene	<5.0	5.0
2,2-Dichloropropane	<5.0	5.0
1,2-Dichloropropane	<5.0	5.0
1,3-Dichloropropane	<5.0	5.0
1,1-Dichloropropylene	<5.0	5.0
cis-1,3-Dichloropropylene	<5.0	5.0
trans-1,3-Dichloropropylene	<5.0	5.0
Ethylbenzene	<2.0	2.0
Hexachlorobutadiene	<10	10
2-Hexanone (MBK)	<50	50
Isopropylbenzene	<5.0	5.0
4-Isopropyltoluene	<5.0	5.0
Methyl-tert-Butyl Ether (MTBE)	<5.0	5.0
Methylene Chloride	<50	50
4-Methyl-2-pentanone (MIBK)	<50	50
Naphthalene	<10	10
n-Propylbenzene	<5.0	5.0
Styrene	<5.0	5.0
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<5.0	5.0
Tetrachloroethylene (PCE)	<5.0	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844369
Project No:	0106270030	**Date Received:**	02/26/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	02/28/14
Method:	VOCs by GC/MS	**Units:**	ug/kg

Date Sampled:	02/26/14	
Date Prepared:	02/26/14	
Date Analyzed:	02/27/14	
AA ID No:	4B26004-01	
Client ID No:	574-IIIA-P/S-O-00 1	
Matrix:	Solid	
Dilution Factor:	1	MRL
8260B (EPA 8260B) (continued)		
Toluene	<2.0	2.0
1,2,4-Trichlorobenzene	<5.0	5.0
1,2,3-Trichlorobenzene	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
1,1,1-Trichloroethane	<5.0	5.0
Trichloroethylene (TCE)	<5.0	5.0
Trichlorofluoromethane (R11)	<5.0	5.0
1,2,3-Trichloropropane	<5.0	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<5.0	5.0
1,2,4-Trimethylbenzene	<5.0	5.0
1,3,5-Trimethylbenzene	<5.0	5.0
Vinyl chloride	<5.0	5.0
o-Xylene	<2.0	2.0
m,p-Xylenes	**2.1**	2.0

Surrogates		**%REC Limits**
4-Bromofluorobenzene	138%	70-140
Dibromofluoromethane	116%	70-140
Toluene-d8	116%	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844369
Project No:	0106270030	**Date Received:**	02/26/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	02/28/14
Method:	Carbon Chain by GC/FID	**Units:**	mg/kg

Date Sampled:	02/26/14	
Date Prepared:	02/27/14	
Date Analyzed:	02/27/14	
AA ID No:	4B26004-01	
Client ID No:	574-IIIA-P/S-O-00 1	
Matrix:	Solid	
Dilution Factor:	1	MRL

Carbon Chain Characterization 8015M (EPA 8015M)

C6-C8	<1.0	1.0
C8-C10	<1.0	1.0
C10-C12	**3.3**	1.0
C12-C14	**8.9**	1.0
C14-C16	**28**	1.0
C16-C18	**110**	1.0
C18-C20	**180**	1.0
C20-C22	**230**	1.0
C22-C24	**290**	1.0
C24-C26	**190**	1.0
C26-C28	**180**	1.0
C28-C32	**190**	1.0
C32-C34	**76**	1.0
C34-C36	**64**	1.0
C36-C40	**26**	1.0
C40-C44	**60**	1.0
TPH (C6-C44)	**1600**	10

Surrogates		**%REC Limits**
o-Terphenyl	74%	50-150

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Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844369
Project No:	0106270030	**Date Received:**	02/26/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	02/28/14
Method:	Total Metals CAM 17	**Units:**	mg/kg

Date Sampled:	02/26/14	
Date Prepared:	02/27/14	
Date Analyzed:	02/28/14	
AA ID No:	4B26004-01	
Client ID No:	574-IIIA-P/S-O-00 1	
Matrix:	Solid	
Dilution Factor:	1	MRL

CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)

Antimony	<10	10
Arsenic	<0.50	0.50
Barium	**170**	10
Beryllium	<1.0	1.0
Cadmium	**9.8**	1.0
Chromium	**270**	3.0
Cobalt	**5.6**	3.0
Copper	**2300**	3.0
Lead	**420**	3.0
Molybdenum	<5.0	5.0
Nickel	**280**	3.0
Selenium	<0.50	0.50
Silver	<1.0	1.0
Thallium	<5.0	5.0
Vanadium	**31**	10
Zinc	**6400**	3.0

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Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844369
Project No:	0106270030	**Date Received:**	02/26/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	02/28/14
Method:	Total Metals CAM 17	**Units:**	mg/kg

Date Sampled:	02/26/14	
Date Prepared:	02/27/14	
Date Analyzed:	02/28/14	
AA ID No:	4B26004-01	
Client ID No:	574-IIIA-P/S-O-00 1	
Matrix:	Solid	
Dilution Factor:	1	MRL

Mercury Total EPA 7470A/7471A (EPA 7471A)

Mercury	**0.078**	0.020

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Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B4B2702 - EPA 3540C										
Blank (B4B2702-BLK1)				Prepared & Analyzed: 02/27/14						
Aroclor-1016	<10	10	ug/kg							
Aroclor-1221	<10	10	ug/kg							
Aroclor-1232	<10	10	ug/kg							
Aroclor-1242	<10	10	ug/kg							
Aroclor-1248	<10	10	ug/kg							
Aroclor-1254	<10	10	ug/kg							
Aroclor-1260	<10	10	ug/kg							
Aroclor-1268	<10	10	ug/kg							
Surrogate: Decachlorobiphenyl	*2.24*		*ug/kg*	*2.5*		*89.6*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*2.07*		*ug/kg*	*2.5*		*83.0*	*50-150*			
LCS (B4B2702-BS1)				Prepared & Analyzed: 02/27/14						
Aroclor-1016	**30.4**	10	ug/kg	25		122	60-140		40	
Aroclor-1260	**29.0**	10	ug/kg	25		116	60-140		40	
Surrogate: Decachlorobiphenyl	*2.35*		*ug/kg*	*2.5*		*93.9*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*2.03*		*ug/kg*	*2.5*		*81.3*	*50-150*			
LCS Dup (B4B2702-BSD1)				Prepared & Analyzed: 02/27/14						
Aroclor-1016	**28.9**	10	ug/kg	25		116	60-140	5.22	40	
Aroclor-1260	**27.4**	10	ug/kg	25		109	60-140	5.68	40	
Surrogate: Decachlorobiphenyl	*2.09*		*ug/kg*	*2.5*		*83.4*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*1.75*		*ug/kg*	*2.5*		*70.1*	*50-150*			
Duplicate (B4B2702-DUP1)		**Source: 4B26004-07**		Prepared & Analyzed: 02/27/14						
Aroclor-1016	**<100**	100	ug/kg		<100				40	
Aroclor-1221	**<100**	100	ug/kg		<100				40	
Aroclor-1232	**<100**	100	ug/kg		<100				40	
Aroclor-1242	**<100**	100	ug/kg		<100				40	
Aroclor-1248	**<100**	100	ug/kg		<100				40	
Aroclor-1254	**<100**	100	ug/kg		<100				40	
Aroclor-1260	**<100**	100	ug/kg		<100				40	
Aroclor-1268	**<20**	20	ug/kg		<100				40	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B4B2702 - EPA 3540C										
Duplicate (B4B2702-DUP1) Continued			**Source: 4B26004-07**	Prepared & Analyzed: 02/27/14						
Surrogate: Decachlorobiphenyl	*5.20*		*ug/kg*	*5.0*		*104*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*4.75*		*ug/kg*	*5.0*		*95.0*	*50-150*			
VOCs by GC/MS - Quality Control										
Batch B4B2606 - EPA 5035										
Blank (B4B2606-BLK1)				Prepared & Analyzed: 02/26/14						
Acetone	<50	50	ug/kg							
Benzene	<2.0	2.0	ug/kg							
Bromobenzene	<5.0	5.0	ug/kg							
Bromochloromethane	<5.0	5.0	ug/kg							
Bromodichloromethane	<5.0	5.0	ug/kg							
Bromoform	<5.0	5.0	ug/kg							
Bromomethane	<5.0	5.0	ug/kg							
2-Butanone (MEK)	<50	50	ug/kg							
sec-Butylbenzene	<5.0	5.0	ug/kg							
n-Butylbenzene	<5.0	5.0	ug/kg							
tert-Butylbenzene	<5.0	5.0	ug/kg							
Carbon Disulfide	<5.0	5.0	ug/kg							
Carbon Tetrachloride	<5.0	5.0	ug/kg							
Chlorobenzene	<5.0	5.0	ug/kg							
Chloroethane	<5.0	5.0	ug/kg							
Chloroform	<5.0	5.0	ug/kg							
Chloromethane	<5.0	5.0	ug/kg							
4-Chlorotoluene	<5.0	5.0	ug/kg							
2-Chlorotoluene	<5.0	5.0	ug/kg							
1,2-Dibromo-3-chloropropane	<10	10	ug/kg							
Dibromochloromethane	<5.0	5.0	ug/kg							
1,2-Dibromoethane (EDB)	<5.0	5.0	ug/kg							
Dibromomethane	<5.0	5.0	ug/kg							
1,3-Dichlorobenzene	<5.0	5.0	ug/kg							
1,2-Dichlorobenzene	<5.0	5.0	ug/kg							
1,4-Dichlorobenzene	<5.0	5.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4B2606 - EPA 5035										
Blank (B4B2606-BLK1) Continued				Prepared & Analyzed: 02/26/14						
Dichlorodifluoromethane (R12)	<5.0	5.0	ug/kg							
1,1-Dichloroethane	<5.0	5.0	ug/kg							
1,2-Dichloroethane (EDC)	<5.0	5.0	ug/kg							
1,1-Dichloroethylene	<5.0	5.0	ug/kg							
trans-1,2-Dichloroethylene	<5.0	5.0	ug/kg							
cis-1,2-Dichloroethylene	<5.0	5.0	ug/kg							
2,2-Dichloropropane	<5.0	5.0	ug/kg							
1,2-Dichloropropane	<5.0	5.0	ug/kg							
1,3-Dichloropropane	<5.0	5.0	ug/kg							
1,1-Dichloropropylene	<5.0	5.0	ug/kg							
cis-1,3-Dichloropropylene	<5.0	5.0	ug/kg							
trans-1,3-Dichloropropylene	<5.0	5.0	ug/kg							
Ethylbenzene	<2.0	2.0	ug/kg							
Hexachlorobutadiene	<10	10	ug/kg							
2-Hexanone (MBK)	<50	50	ug/kg							
Isopropylbenzene	<5.0	5.0	ug/kg							
4-Isopropyltoluene	<5.0	5.0	ug/kg							
Methyl-tert-Butyl Ether (MTBE)	<5.0	5.0	ug/kg							
Methylene Chloride	<50	50	ug/kg							
4-Methyl-2-pentanone (MIBK)	<50	50	ug/kg							
Naphthalene	<10	10	ug/kg							
n-Propylbenzene	<5.0	5.0	ug/kg							
Styrene	<5.0	5.0	ug/kg							
1,1,2,2-Tetrachloroethane	<5.0	5.0	ug/kg							
1,1,1,2-Tetrachloroethane	<5.0	5.0	ug/kg							
Tetrachloroethylene (PCE)	<5.0	5.0	ug/kg							
Toluene	<2.0	2.0	ug/kg							
1,2,4-Trichlorobenzene	<5.0	5.0	ug/kg							
1,2,3-Trichlorobenzene	<5.0	5.0	ug/kg							
1,1,2-Trichloroethane	<5.0	5.0	ug/kg							
1,1,1-Trichloroethane	<5.0	5.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4B2606 - EPA 5035										
Blank (B4B2606-BLK1) Continued				Prepared & Analyzed: 02/26/14						
Trichloroethylene (TCE)	<5.0	5.0	ug/kg							
Trichlorofluoromethane (R11)	<5.0	5.0	ug/kg							
1,2,3-Trichloropropane	<5.0	5.0	ug/kg							
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<5.0	5.0	ug/kg							
1,2,4-Trimethylbenzene	<5.0	5.0	ug/kg							
1,3,5-Trimethylbenzene	<5.0	5.0	ug/kg							
Vinyl chloride	<5.0	5.0	ug/kg							
o-Xylene	<2.0	2.0	ug/kg							
m,p-Xylenes	<2.0	2.0	ug/kg							
Surrogate: 4-Bromofluorobenzene	*125*		*ug/kg*	*100*		*125*	*70-140*			
Surrogate: Dibromofluoromethane	*107*		*ug/kg*	*100*		*107*	*70-140*			
Surrogate: Toluene-d8	*103*		*ug/kg*	*100*		*103*	*70-140*			
LCS (B4B2606-BS1)				Prepared & Analyzed: 02/26/14						
Benzene	**38.9**	2.0	ug/kg	40		97.2	75-125			
Bromodichloromethane	**42.0**	5.0	ug/kg	40		105	75-125			
Bromoform	**35.9**	5.0	ug/kg	40		89.8	75-125			
Carbon Tetrachloride	**35.1**	5.0	ug/kg	40		87.8	75-125			
Chlorobenzene	**40.0**	5.0	ug/kg	40		100	75-125			
Chloroethane	**39.6**	5.0	ug/kg	40		99.1	75-125			
Chloroform	**42.4**	5.0	ug/kg	40		106	75-125			
Chloromethane	**35.7**	5.0	ug/kg	40		89.2	65-125			
Dibromochloromethane	**41.4**	5.0	ug/kg	40		104	75-125			
1,4-Dichlorobenzene	**40.4**	5.0	ug/kg	40		101	75-125			
1,1-Dichloroethane	**44.1**	5.0	ug/kg	40		110	70-125			
1,2-Dichloroethane (EDC)	**43.5**	5.0	ug/kg	40		109	75-125			
1,1-Dichloroethylene	**43.0**	5.0	ug/kg	40		108	70-130			
trans-1,2-Dichloroethylene	**42.0**	5.0	ug/kg	40		105	75-125			
cis-1,2-Dichloroethylene	**43.6**	5.0	ug/kg	40		109	75-125			
1,2-Dichloropropane	**44.3**	5.0	ug/kg	40		111	75-130			
cis-1,3-Dichloropropylene	**33.5**	5.0	ug/kg	40		83.8	75-125			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4B2606 - EPA 5035										
LCS (B4B2606-BS1) Continued				Prepared & Analyzed: 02/26/14						
Ethylbenzene	**35.4**	2.0	ug/kg	40		88.6	75-125			
Methyl-tert-Butyl Ether (MTBE)	**34.8**	5.0	ug/kg	40		87.0	75-125			
Methylene Chloride	**42.9**	50	ug/kg	40		107	75-130			
1,1,2,2-Tetrachloroethane	**43.3**	5.0	ug/kg	40		108	70-135			
Tetrachloroethylene (PCE)	**36.8**	5.0	ug/kg	40		92.0	75-125			
Toluene	**36.7**	2.0	ug/kg	40		91.8	75-125			
1,1,2-Trichloroethane	**45.3**	5.0	ug/kg	40		113	75-125			
1,1,1-Trichloroethane	**35.8**	5.0	ug/kg	40		89.6	75-125			
Trichloroethylene (TCE)	**41.5**	5.0	ug/kg	40		104	75-125			
Vinyl chloride	**37.6**	5.0	ug/kg	40		93.9	75-125			
o-Xylene	**39.8**	2.0	ug/kg	40		99.6	75-125			
Surrogate: 4-Bromofluorobenzene	*114*		*ug/kg*	*100*		*114*	*70-140*			
Surrogate: Dibromofluoromethane	*114*		*ug/kg*	*100*		*114*	*70-140*			
Surrogate: Toluene-d8	*108*		*ug/kg*	*100*		*108*	*70-140*			
Matrix Spike (B4B2606-MS1)		**Source: 4B20006-06**		Prepared: 02/26/14	Analyzed: 02/27/14					
Benzene	**43.6**	2.0	ug/kg	40		109	70-130			
Bromoform	**37.1**	5.0	ug/kg	40		92.6	70-130			
Chlorobenzene	**43.8**	5.0	ug/kg	40		110	70-130			
Chloroform	**49.8**	5.0	ug/kg	40		124	70-130			
1,1-Dichloroethane	**49.6**	5.0	ug/kg	40		124	70-130			
1,1-Dichloroethylene	**48.2**	5.0	ug/kg	40		120	70-130			
cis-1,2-Dichloroethylene	**50.3**	5.0	ug/kg	40		126	70-130			
1,2-Dichloropropane	**48.9**	5.0	ug/kg	40		122	70-130			
Ethylbenzene	**36.2**	2.0	ug/kg	40		90.4	70-130			
Methyl-tert-Butyl Ether (MTBE)	**33.7**	5.0	ug/kg	40		84.2	70-130			
n-Propylbenzene	**40.7**	5.0	ug/kg	40		102	70-130			
Tetrachloroethylene (PCE)	**41.6**	5.0	ug/kg	40		104	70-130			
Toluene	**41.3**	2.0	ug/kg	40		103	70-130			
1,1,1-Trichloroethane	**42.4**	5.0	ug/kg	40		106	70-130			
Trichloroethylene (TCE)	**49.6**	5.0	ug/kg	40		124	70-130			
1,3,5-Trimethylbenzene	**45.3**	5.0	ug/kg	40		113	70-130			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4B2606 - EPA 5035										
Matrix Spike (B4B2606-MS1) Continued Source: 4B20006-06 Prepared: 02/26/14 Analyzed: 02/27/14										
Vinyl chloride	**48.2**	5.0	ug/kg	40		120	70-130			
Surrogate: 4-Bromofluorobenzene	*113*		*ug/kg*	*100*		*113*	*70-140*			
Surrogate: Dibromofluoromethane	*121*		*ug/kg*	*100*		*121*	*70-140*			
Surrogate: Toluene-d8	*113*		*ug/kg*	*100*		*113*	*70-140*			
Matrix Spike Dup (B4B2606-MSD1) **Source: 4B20006-06** Prepared: 02/26/14 Analyzed: 02/27/14										
Benzene	**40.7**	2.0	ug/kg	40		102	70-130	6.93	40	
Bromoform	**33.8**	5.0	ug/kg	40		84.6	70-130	9.08	40	
Chlorobenzene	**40.6**	5.0	ug/kg	40		101	70-130	7.68	40	
Chloroform	**45.9**	5.0	ug/kg	40		115	70-130	8.15	40	
1,1-Dichloroethane	**49.9**	5.0	ug/kg	40		125	70-130	0.603	40	
1,1-Dichloroethylene	**48.1**	5.0	ug/kg	40		120	70-130	0.166	40	
cis-1,2-Dichloroethylene	**48.2**	5.0	ug/kg	40		120	70-130	4.27	40	
1,2-Dichloropropane	**47.8**	5.0	ug/kg	40		119	70-130	2.28	40	
Ethylbenzene	**32.9**	2.0	ug/kg	40		82.4	70-130	9.32	40	
Methyl-tert-Butyl Ether (MTBE)	**33.1**	5.0	ug/kg	40		82.6	70-130	1.86	40	
n-Propylbenzene	**36.5**	5.0	ug/kg	40		91.4	70-130	10.8	40	
Tetrachloroethylene (PCE)	**38.0**	5.0	ug/kg	40		95.1	70-130	9.04	40	
Toluene	**37.8**	2.0	ug/kg	40		94.6	70-130	8.70	40	
1,1,1-Trichloroethane	**40.3**	5.0	ug/kg	40		101	70-130	5.22	40	
Trichloroethylene (TCE)	**46.4**	5.0	ug/kg	40		116	70-130	6.75	40	
1,3,5-Trimethylbenzene	**42.5**	5.0	ug/kg	40		106	70-130	6.38	40	
Vinyl chloride	**49.1**	5.0	ug/kg	40		123	70-130	1.89	40	
Surrogate: 4-Bromofluorobenzene	*108*		*ug/kg*	*100*		*108*	*70-140*			
Surrogate: Dibromofluoromethane	*122*		*ug/kg*	*100*		*122*	*70-140*			
Surrogate: Toluene-d8	*111*		*ug/kg*	*100*		*111*	*70-140*			
Carbon Chain by GC/FID - Quality Control										
Batch B4B2705 - EPA 3550B										
Blank (B4B2705-BLK1) Prepared & Analyzed: 02/27/14										
C6-C8	<1.0	1.0	mg/kg							
C8-C10	<1.0	1.0	mg/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon Chain by GC/FID - Quality Control										
Batch B4B2705 - EPA 3550B										
Blank (B4B2705-BLK1) Continued				Prepared & Analyzed: 02/27/14						
C10-C12	<1.0	1.0	mg/kg							
C12-C14	<1.0	1.0	mg/kg							
C14-C16	<1.0	1.0	mg/kg							
C16-C18	<1.0	1.0	mg/kg							
C18-C20	<1.0	1.0	mg/kg							
C20-C22	<1.0	1.0	mg/kg							
C22-C24	<1.0	1.0	mg/kg							
C24-C26	<1.0	1.0	mg/kg							
C26-C28	<1.0	1.0	mg/kg							
C28-C32	<1.0	1.0	mg/kg							
C32-C34	<1.0	1.0	mg/kg							
C34-C36	<1.0	1.0	mg/kg							
C36-C40	<1.0	1.0	mg/kg							
C40-C44	<1.0	1.0	mg/kg							
TPH (C6-C44)	<10	10	mg/kg							
Surrogate: o-Terphenyl	*7.62*		*mg/kg*	*10*		*76.2*	*50-150*			
LCS (B4B2705-BS1)				Prepared & Analyzed: 02/27/14						
Diesel Range Organics as Diesel	**175**	10	mg/kg	200		87.5	75-125		40	
Surrogate: o-Terphenyl	*8.29*		*mg/kg*	*10*		*82.9*	*50-150*			
LCS Dup (B4B2705-BSD1)				Prepared & Analyzed: 02/27/14						
Diesel Range Organics as Diesel	**180**	10	mg/kg	200		90.1	75-125	2.96	40	
Surrogate: o-Terphenyl	*9.03*		*mg/kg*	*10*		*90.3*	*50-150*			
Total Metals CAM 17 - Quality Control										
Batch B4B2717 - EPA 3050B										
Blank (B4B2717-BLK1)				Prepared: 02/27/14 Analyzed: 02/28/14						
Antimony	<10	10	mg/kg							
Arsenic	<0.50	0.50	mg/kg							
Barium	<10	10	mg/kg							
Beryllium	<1.0	1.0	mg/kg							
Cadmium	<1.0	1.0	mg/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4B2717 - EPA 3050B										
Blank (B4B2717-BLK1) Continued				Prepared: 02/27/14	Analyzed: 02/28/14					
Chromium	<3.0	3.0	mg/kg							
Cobalt	<3.0	3.0	mg/kg							
Copper	<3.0	3.0	mg/kg							
Lead	<3.0	3.0	mg/kg							
Molybdenum	<5.0	5.0	mg/kg							
Nickel	<3.0	3.0	mg/kg							
Selenium	<0.50	0.50	mg/kg							
Silver	<1.0	1.0	mg/kg							
Thallium	<5.0	5.0	mg/kg							
Vanadium	<10	10	mg/kg							
Zinc	<3.0	3.0	mg/kg							
LCS (B4B2717-BS1)				Prepared: 02/27/14	Analyzed: 02/28/14					
Antimony	**45.7**	10	mg/kg	50		91.4	80-120			
Arsenic	**52.2**	0.50	mg/kg	50		104	80-120			
Barium	**52.0**	10	mg/kg	50		104	80-120			
Beryllium	**50.6**	1.0	mg/kg	50		101	80-120			
Cadmium	**52.8**	1.0	mg/kg	50		106	80-120			
Chromium	**52.2**	3.0	mg/kg	50		104	80-120			
Cobalt	**52.7**	3.0	mg/kg	50		105	80-120			
Copper	**52.2**	3.0	mg/kg	50		104	80-120			
Lead	**52.5**	3.0	mg/kg	50		105	80-120			
Molybdenum	**53.3**	5.0	mg/kg	50		107	80-120			
Nickel	**53.2**	3.0	mg/kg	50		106	80-120			
Selenium	**53.8**	0.50	mg/kg	50		108	80-120			
Silver	**52.6**	1.0	mg/kg	50		105	80-120			
Thallium	**54.8**	5.0	mg/kg	50		110	80-120			
Vanadium	**52.0**	10	mg/kg	50		104	80-120			
Zinc	**53.1**	3.0	mg/kg	50		106	80-120			
LCS Dup (B4B2717-BSD1)				Prepared: 02/27/14	Analyzed: 02/28/14					
Antimony	**46.9**	10	mg/kg	50		93.8	80-120	2.55	20	
Arsenic	**52.0**	0.50	mg/kg	50		104	80-120	0.192	20	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4B2717 - EPA 3050B										
LCS Dup (B4B2717-BSD1) Continued				Prepared: 02/27/14 Analyzed: 02/28/14						
Barium	**52.2**	10	mg/kg	50		104	80-120	0.384	20	
Beryllium	**50.8**	1.0	mg/kg	50		102	80-120	0.394	20	
Cadmium	**53.2**	1.0	mg/kg	50		106	80-120	0.660	20	
Chromium	**52.4**	3.0	mg/kg	50		105	80-120	0.191	20	
Cobalt	**53.0**	3.0	mg/kg	50		106	80-120	0.662	20	
Copper	**52.4**	3.0	mg/kg	50		105	80-120	0.191	20	
Lead	**52.0**	3.0	mg/kg	50		104	80-120	0.861	20	
Molybdenum	**53.0**	5.0	mg/kg	50		106	80-120	0.659	20	
Nickel	**52.8**	3.0	mg/kg	50		106	80-120	0.755	20	
Selenium	**53.5**	0.50	mg/kg	50		107	80-120	0.652	20	
Silver	**52.6**	1.0	mg/kg	50		105	80-120	0.0951	20	
Thallium	**55.0**	5.0	mg/kg	50		110	80-120	0.365	20	
Vanadium	**51.8**	10	mg/kg	50		104	80-120	0.193	20	
Zinc	**53.0**	3.0	mg/kg	50		106	80-120	0.283	20	
Duplicate (B4B2717-DUP1)		**Source: 4B24004-23**		Prepared: 02/27/14 Analyzed: 02/28/14						
Antimony	**<10**	10	mg/kg						40	
Arsenic	**5.11**	0.50	mg/kg		6.12			18.0	40	
Barium	**144**	10	mg/kg		144			0.0692	40	
Beryllium	**<1.0**	1.0	mg/kg						40	
Cadmium	**6.92**	1.0	mg/kg		6.87			0.797	40	
Chromium	**20.5**	3.0	mg/kg		20.8			1.07	40	
Cobalt	**11.9**	3.0	mg/kg		11.7			1.10	40	
Copper	**31.3**	3.0	mg/kg		31.7			1.19	40	
Lead	**7.06**	3.0	mg/kg		6.94			1.72	40	
Molybdenum	**<5.0**	5.0	mg/kg						40	
Nickel	**17.6**	3.0	mg/kg		17.9			1.43	40	
Selenium	**<0.50**	0.50	mg/kg						40	
Silver	**<1.0**	1.0	mg/kg						40	
Thallium	**<5.0**	5.0	mg/kg						40	
Vanadium	**41.9**	10	mg/kg		41.9			0.0119	40	
Zinc	**63.7**	3.0	mg/kg		61.7			3.19	40	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4B2717 - EPA 3050B										
Matrix Spike (B4B2717-MS1)		**Source: 4B25003-01** Prepared: 02/27/14 Analyzed: 02/28/14								
Antimony	**45.8**	10	mg/kg	50		91.7	75-125			
Arsenic	**59.0**	0.50	mg/kg	50	8.15	102	75-125			
Barium	**151**	10	mg/kg	50	103	97.1	75-125			
Beryllium	**48.8**	1.0	mg/kg	50		97.7	75-125			
Cadmium	**55.0**	1.0	mg/kg	50	5.41	99.1	75-125			
Chromium	**64.9**	3.0	mg/kg	50	16.7	96.4	75-125			
Cobalt	**59.4**	3.0	mg/kg	50	9.06	101	75-125			
Copper	**80.8**	3.0	mg/kg	50	28.4	105	75-125			
Lead	**70.6**	3.0	mg/kg	50	21.1	99.1	75-125			
Molybdenum	**51.2**	5.0	mg/kg	50		102	75-125			
Nickel	**62.4**	3.0	mg/kg	50	14.1	96.7	75-125			
Selenium	**53.0**	0.50	mg/kg	50		106	75-125			
Silver	**51.6**	1.0	mg/kg	50		103	75-125			
Thallium	**42.1**	5.0	mg/kg	50		84.2	60-140			
Vanadium	**82.4**	10	mg/kg	50	33.5	97.8	75-125			
Zinc	**176**	3.0	mg/kg	50	134	82.3	75-125			
Matrix Spike Dup (B4B2717-MSD1)		**Source: 4B25003-01** Prepared: 02/27/14 Analyzed: 02/28/14								
Antimony	**46.8**	10	mg/kg	50		93.7	75-125	2.19	40	
Arsenic	**58.6**	0.50	mg/kg	50	8.15	101	75-125	0.681	40	
Barium	**161**	10	mg/kg	50	103	117	75-125	6.34	40	
Beryllium	**49.6**	1.0	mg/kg	50		99.2	75-125	1.49	40	
Cadmium	**56.2**	1.0	mg/kg	50	5.41	102	75-125	2.25	40	
Chromium	**66.7**	3.0	mg/kg	50	16.7	100	75-125	2.74	40	
Cobalt	**60.6**	3.0	mg/kg	50	9.06	103	75-125	2.00	40	
Copper	**81.4**	3.0	mg/kg	50	28.4	106	75-125	0.739	40	
Lead	**69.2**	3.0	mg/kg	50	21.1	96.2	75-125	2.07	40	
Molybdenum	**52.1**	5.0	mg/kg	50		104	75-125	1.84	40	
Nickel	**64.3**	3.0	mg/kg	50	14.1	100	75-125	2.92	40	
Selenium	**53.9**	0.50	mg/kg	50		108	75-125	1.68	40	
Silver	**51.6**	1.0	mg/kg	50		103	75-125	0.0969	40	
Thallium	**42.7**	5.0	mg/kg	50		85.3	60-140	1.30	40	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844369
Date Received: 02/26/14
Date Reported: 02/28/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4B2717 - EPA 3050B										
Matrix Spike Dup (B4B2717-MSD1) Continued			**Source: 4B25003-01**	Prepared: 02/27/14			Analyzed: 02/28/14			
Vanadium	**84.9**	10	mg/kg	50	33.5	103	75-125	2.93	40	
Zinc	**157**	3.0	mg/kg	50	134	45.4	75-125	11.1	40	
Total Metals CAM 17 - Quality Control										
Batch B4B2718 - EPA 7471A Prep										
Blank (B4B2718-BLK1)				Prepared: 02/27/14			Analyzed: 02/28/14			
Mercury	<0.020	0.020	mg/kg							
LCS (B4B2718-BS1)				Prepared: 02/27/14			Analyzed: 02/28/14			
Mercury	**0.454**	0.020	mg/kg	0.50		90.9	80-120			
LCS Dup (B4B2718-BSD1)				Prepared: 02/27/14			Analyzed: 02/28/14			
Mercury	**0.484**	0.020	mg/kg	0.50		96.7	80-120	6.18	25	
Duplicate (B4B2718-DUP1)			**Source: 4B24004-23**	Prepared: 02/27/14			Analyzed: 02/28/14			
Mercury	**0.0920**	0.020	mg/kg		0.0880			4.44	25	
Matrix Spike (B4B2718-MS1)			**Source: 4B25003-01**	Prepared: 02/27/14			Analyzed: 02/28/14			
Mercury	**0.616**	0.020	mg/kg	0.50	0.0640	110	75-125			
Matrix Spike Dup (B4B2718-MSD1)			**Source: 4B25003-01**	Prepared: 02/27/14			Analyzed: 02/28/14			
Mercury	**0.625**	0.020	mg/kg	0.50	0.0640	112	75-125	1.53	25	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844369
Project No:	0106270030	**Date Received:**	02/26/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	02/28/14

Special Notes

[1] = **R-01** : The Reporting Limit for this analyte has been raised to account for matrix interference.

[2] = **S-01** : The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

Viorel Vasile
Operations Manager

CHAIN-OF-CUSTODY RECORD A8440369/4826004 119204 NB25730

PROJECT NAME: PECHINEY

PROJECT NUMBER: 106270030

RESULTS TO: LINDA CONLAN

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: COURIER

LABORATORY NAME: AMERICAN ANALYTICS

LABORATORY ADDRESS:

LABORATORY CONTACT: Viorel Vasile

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC IRVINE

DATE: 2/26/14 PAGE 1 OF 1

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	8082 PCBs	Title 22 metals	8015 TPH	8260 VOCs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
2/26/14	1055	574-IIIA-P/S-0-001	X	X	X	X	4oz JAR	S		None	X		1	AB26004-01
	1111	565-IV-0-CS-001	X					O			X		1	-02
	1118	565-IV-0-CS-002	X					O			X		1	-03
	1125	565-IV-0-CS-003	X					O			X		1	-04
	1130	565-IV-0-CS-004	X					O			X		1	-05
	1315	142-I-P/S-0-001	X					O			X		1	-06
2/26/14	1320	142-I-P/S-0-002	X				4oz JAR	O			X		1	-07

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	2/26/14	1400	SIGNATURE:	2/26/14	1400
PRINTED NAME:			PRINTED NAME: STEPHEN Amang		
COMPANY: AMEC			COMPANY: AMEC		
SIGNATURE:	2/26/14	1470	SIGNATURE:	2/26/14	14:50
PRINTED NAME: STEPHEN Amang			PRINTED NAME: GUSTAVO LOPEZ		
COMPANY: AMEC			COMPANY: American A.		
SIGNATURE:	2/26/14	1530	SIGNATURE:	2/26/14	15
PRINTED NAME: GUSTAVO LOPEZ			PRINTED NAME: VIOREL VASILE		
COMPANY:			COMPANY: KA		

TOTAL NUMBER OF CONTAINERS: 7

SAMPLING COMMENTS:

PRIORITY

Rush 48 Hrs SH

Date 2/26/14 Time 1600 Sign

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

9765 Eton Avenue
Chatsworth
California 91311
Tel: (818) 998-5547
Fax: (818) 998-7258

March 24, 2014

Linda Conlan

AMEC Environment & Infrastructure, Inc.

121 Innovation Drive, Suite 200

Irvine, CA 92617

Re : Former Pechiney Cast Plate, Inc. / 0106270030

A844377 / 4C20006

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 03/20/14 16:55 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8082 PCBs					
643-IIB-P/S-CS-001	4C20006-01	Concrete	2	03/20/14 07:32	03/20/14 16:55
DC-409	4C20006-02	Concrete	2	03/20/14 07:40	03/20/14 16:55
DC-410	4C20006-03	Concrete	2	03/20/14 07:44	03/20/14 16:55
DC-411	4C20006-04	Concrete	2	03/20/14 07:50	03/20/14 16:55
DC-412	4C20006-05	Concrete	2	03/20/14 07:56	03/20/14 16:55
DC-413	4C20006-06	Concrete	2	03/20/14 08:01	03/20/14 16:55
642-IV-P-SS-001	4C20006-07	Soil	2	03/20/14 09:15	03/20/14 16:55
642-IV-P-SS-002	4C20006-08	Soil	2	03/20/14 09:19	03/20/14 16:55
642-IV-P-O-001	4C20006-09	Sludge	2	03/20/14 09:17	03/20/14 16:55
642-IV-P-SS-003	4C20006-10	Soil	2	03/20/14 09:21	03/20/14 16:55
642-IV-P-SS-004	4C20006-11	Soil	2	03/20/14 09:23	03/20/14 16:55
642-IV-P-SS-005	4C20006-12	Soil	2	03/20/14 09:25	03/20/14 16:55
642-IV-P-SS-006	4C20006-13	Soil	2	03/20/14 09:27	03/20/14 16:55
8260B					
642-IV-P-O-001	4C20006-09	Sludge	2	03/20/14 09:17	03/20/14 16:55
CAM Metals Less Hg 6000/7000					
642-IV-P-O-001	4C20006-09	Sludge	2	03/20/14 09:17	03/20/14 16:55

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
Carbon Chain Characterization 8015M					
642-IV-P-O-001	4C20006-09	Sludge	2	03/20/14 09:17	03/20/14 16:55
642-IV-P-SS-003	4C20006-10	Soil	2	03/20/14 09:21	03/20/14 16:55
Mercury Total EPA 7470A/7471A					
642-IV-P-O-001	4C20006-09	Sludge	2	03/20/14 09:17	03/20/14 16:55

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14
Units: ug/kg

Date Sampled:	03/20/14	03/20/14	03/20/14	03/20/14	
Date Prepared:	03/21/14	03/21/14	03/21/14	03/21/14	
Date Analyzed:	03/21/14	03/21/14	03/21/14	03/21/14	
AA ID No:	4C20006-01	4C20006-02	4C20006-03	4C20006-04	
Client ID No:	643-IIB-P/S-CS-0 01	DC-409	DC-410	DC-411	
Matrix:	Concrete	Concrete	Concrete	Concrete	
Dilution Factor:	5	5	5	5	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<100	<100	<100	<100	20
Aroclor-1221	<100	<100	<100	<100	20
Aroclor-1232	<100	<100	<100	<100	20
Aroclor-1242	<100	<100	<100	<100	20
Aroclor-1248	<100	**340**	**140**	**410**	20
Aroclor-1254	<100	**680**	<100	**620**	20
Aroclor-1260	<100	<100	<100	<100	20
Aroclor-1268	<100	<100	<100	<100	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	93%	85%	87%	116%	50-150
Tetrachloro-meta-xylene	93%	83%	96%	119%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14
Units: ug/kg

Date Sampled:	03/20/14	03/20/14	03/20/14	03/20/14	
Date Prepared:	03/21/14	03/21/14	03/21/14	03/21/14	
Date Analyzed:	03/21/14	03/21/14	03/21/14	03/21/14	
AA ID No:	4C20006-05	4C20006-06	4C20006-07	4C20006-08	
Client ID No:	DC-412	DC-413	642-IV-P-SS-001	642-IV-P-SS-002	
Matrix:	Concrete	Concrete	Soil	Soil	
Dilution Factor:	5	5	5	5	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<100	<100	<100	<100	20
Aroclor-1221	<100	<100	<100	<100	20
Aroclor-1232	<100	<100	<100	<100	20
Aroclor-1242	<100	<100	<100	<100	20
Aroclor-1248	**200**	<100	<100	<100	20
Aroclor-1254	**460**	<100	<100	<100	20
Aroclor-1260	<100	<100	<100	<100	20
Aroclor-1268	<100	<100	<100	<100	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	101%	107%	92%	107%	50-150
Tetrachloro-meta-xylene	99%	110%	106%	113%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14
Units: ug/kg

Date Sampled:	03/20/14	03/20/14	03/20/14	03/20/14	
Date Prepared:	03/21/14	03/21/14	03/21/14	03/21/14	
Date Analyzed:	03/21/14	03/21/14	03/21/14	03/21/14	
AA ID No:	4C20006-09	4C20006-10	4C20006-11	4C20006-12	
Client ID No:	642-IV-P-O-001	642-IV-P-SS-003	642-IV-P-SS-004	642-IV-P-SS-005	
Matrix:	Sludge	Soil	Soil	Soil	
Dilution Factor:	5	5	5	5	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<100	<100	<100	<100	20
Aroclor-1221	<100	<100	<100	<100	20
Aroclor-1232	<100	<100	<100	<100	20
Aroclor-1242	<100	<100	<100	<100	20
Aroclor-1248	<100	<100	<100	<100	20
Aroclor-1254	**1100**	<100	<100	<100	20
Aroclor-1260	**880**	<100	<100	<100	20
Aroclor-1268	<100	<100	<100	<100	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	0.0 [1]	106%	87%	71%	50-150
Tetrachloro-meta-xylene	90%	103%	87%	83%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844377
Project No:	0106270030	**Date Received:**	03/20/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	03/24/14
Method:	Polychlorinated Biphenyls by GC	**Units:**	ug/kg

Date Sampled:	03/20/14	
Date Prepared:	03/21/14	
Date Analyzed:	03/21/14	
AA ID No:	4C20006-13	
Client ID No:	642-IV-P-SS-006	
Matrix:	Soil	
Dilution Factor:	5	MRL
8082 PCBs (EPA 8082)		
Aroclor-1016	<100	20
Aroclor-1221	<100	20
Aroclor-1232	<100	20
Aroclor-1242	<100	20
Aroclor-1248	<100	20
Aroclor-1254	<100	20
Aroclor-1260	<100	20
Aroclor-1268	<100	20

Surrogates		**%REC Limits**
Decachlorobiphenyl	66%	50-150
Tetrachloro-meta-xylene	66%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844377
Project No:	0106270030	**Date Received:**	03/20/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	03/24/14
Method:	VOCs by GC/MS	**Units:**	ug/kg

Date Sampled:	03/20/14	
Date Prepared:	03/21/14	
Date Analyzed:	03/22/14	
AA ID No:	4C20006-09	
Client ID No:	642-IV-P-O-001	
Matrix:	Sludge	
Dilution Factor:	1	MRL
8260B (EPA 8260B)		
Acetone	<50	50
Benzene	<2.0	2.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<5.0	5.0
Bromodichloromethane	<5.0	5.0
Bromoform	<5.0	5.0
Bromomethane	<5.0	5.0
2-Butanone (MEK)	<50	50
sec-Butylbenzene	<5.0	5.0
n-Butylbenzene	<5.0	5.0
tert-Butylbenzene	<5.0	5.0
Carbon Disulfide	<5.0	5.0
Carbon Tetrachloride	<5.0	5.0
Chlorobenzene	<5.0	5.0
Chloroethane	<5.0	5.0
Chloroform	<5.0	5.0
Chloromethane	<5.0	5.0
4-Chlorotoluene	<5.0	5.0
2-Chlorotoluene	<5.0	5.0
1,2-Dibromo-3-chloropropane	<10	10
Dibromochloromethane	<5.0	5.0
1,2-Dibromoethane (EDB)	<5.0	5.0
Dibromomethane	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,2-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorodifluoromethane (R12)	<5.0	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844377
Project No:	0106270030	**Date Received:**	03/20/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	03/24/14
Method:	VOCs by GC/MS	**Units:**	ug/kg

Date Sampled:	03/20/14	
Date Prepared:	03/21/14	
Date Analyzed:	03/22/14	
AA ID No:	4C20006-09	
Client ID No:	642-IV-P-O-001	
Matrix:	Sludge	
Dilution Factor:	1	MRL

8260B (EPA 8260B) (continued)

1,1-Dichloroethane	<5.0	5.0
1,2-Dichloroethane (EDC)	<5.0	5.0
1,1-Dichloroethylene	<5.0	5.0
trans-1,2-Dichloroethylene	<5.0	5.0
cis-1,2-Dichloroethylene	<5.0	5.0
2,2-Dichloropropane	<5.0	5.0
1,2-Dichloropropane	<5.0	5.0
1,3-Dichloropropane	<5.0	5.0
1,1-Dichloropropylene	<5.0	5.0
cis-1,3-Dichloropropylene	<5.0	5.0
trans-1,3-Dichloropropylene	<5.0	5.0
Ethylbenzene	<2.0	2.0
Hexachlorobutadiene	<10	10
2-Hexanone (MBK)	<50	50
Isopropylbenzene	<5.0	5.0
4-Isopropyltoluene	<5.0	5.0
Methyl-tert-Butyl Ether (MTBE)	<5.0	5.0
Methylene Chloride	<50	50
4-Methyl-2-pentanone (MIBK)	<50	50
Naphthalene	<10	10
n-Propylbenzene	<5.0	5.0
Styrene	<5.0	5.0
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<5.0	5.0
Tetrachloroethylene (PCE)	<5.0	5.0
Toluene	<2.0	2.0
1,2,4-Trichlorobenzene	<5.0	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844377
Project No:	0106270030	**Date Received:**	03/20/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	03/24/14
Method:	VOCs by GC/MS	**Units:**	ug/kg

Date Sampled:	03/20/14	
Date Prepared:	03/21/14	
Date Analyzed:	03/22/14	
AA ID No:	4C20006-09	
Client ID No:	642-IV-P-O-001	
Matrix:	Sludge	
Dilution Factor:	1	MRL

8260B (EPA 8260B) (continued)

1,2,3-Trichlorobenzene	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
1,1,1-Trichloroethane	<5.0	5.0
Trichloroethylene (TCE)	<5.0	5.0
Trichlorofluoromethane (R11)	<5.0	5.0
1,2,3-Trichloropropane	<5.0	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<5.0	5.0
1,2,4-Trimethylbenzene	<5.0	5.0
1,3,5-Trimethylbenzene	<5.0	5.0
Vinyl chloride	<5.0	5.0
o-Xylene	<2.0	2.0
m,p-Xylenes	<2.0	2.0

Surrogates		**%REC Limits**
4-Bromofluorobenzene	116%	70-140
Dibromofluoromethane	101%	70-140
Toluene-d8	108%	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Carbon Chain by GC/FID

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14
Units: mg/kg

Date Sampled:	03/20/14	03/20/14	
Date Prepared:	03/23/14	03/23/14	
Date Analyzed:	03/24/14	03/24/14	
AA ID No:	4C20006-09	4C20006-10	
Client ID No:	642-IV-P-O-001	642-IV-P-SS-003	
Matrix:	Sludge	Soil	
Dilution Factor:	1	1	MRL
Carbon Chain Characterization 8015M (EPA 8015M)			
C6-C8	<1.0	<1.0	1.0
C8-C10	<1.0	<1.0	1.0
C10-C12	<1.0	<1.0	1.0
C12-C14	<1.0	<1.0	1.0
C14-C16	<1.0	<1.0	1.0
C16-C18	**5.2**	<1.0	1.0
C18-C20	**9.6**	**2.9**	1.0
C20-C22	**9.7**	**7.2**	1.0
C22-C24	**9.4**	**17**	1.0
C24-C26	**8.5**	**23**	1.0
C26-C28	**14**	**33**	1.0
C28-C32	**27**	**46**	1.0
C32-C34	**8.2**	**11**	1.0
C34-C36	**4.6**	**10**	1.0
C36-C40	**6.8**	**12**	1.0
C40-C44	**8.2**	**11**	1.0
TPH (C6-C44)	**110**	**170**	10
Surrogates			**%REC Limits**
o-Terphenyl	82%	89%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844377
Project No:	0106270030	**Date Received:**	03/20/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	03/24/14
Method:	Total Metals CAM 17	**Units:**	mg/kg

Date Sampled:	03/20/14	
Date Prepared:	03/21/14	
Date Analyzed:	03/21/14	
AA ID No:	4C20006-09	
Client ID No:	642-IV-P-O-001	
Matrix:	Sludge	
Dilution Factor:	1	MRL

CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)

Antimony	<10	10
Arsenic	**54**	0.50
Barium	**130**	10
Beryllium	<1.0	1.0
Cadmium	<1.0	1.0
Chromium	**28**	3.0
Cobalt	**15**	3.0
Copper	**320**	3.0
Lead	**74**	3.0
Molybdenum	<5.0	5.0
Nickel	**22**	3.0
Selenium	<0.50	0.50
Silver	<1.0	1.0
Thallium	<5.0	5.0
Vanadium	**78**	10
Zinc	**690**	3.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844377
Project No:	0106270030	**Date Received:**	03/20/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	03/24/14
Method:	Total Metals CAM 17	**Units:**	mg/kg

Date Sampled:	03/20/14	
Date Prepared:	03/21/14	
Date Analyzed:	03/21/14	
AA ID No:	4C20006-09	
Client ID No:	642-IV-P-O-001	
Matrix:	Sludge	
Dilution Factor:	1	MRL

Mercury Total EPA 7470A/7471A (EPA 7471A)

Mercury	**0.10**	0.020

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B4C2101 - EPA 3540C										
Blank (B4C2101-BLK1)				Prepared & Analyzed: 03/21/14						
Aroclor-1016	<10	10	ug/kg							
Aroclor-1221	<10	10	ug/kg							
Aroclor-1232	<10	10	ug/kg							
Aroclor-1242	<10	10	ug/kg							
Aroclor-1248	<10	10	ug/kg							
Aroclor-1254	<10	10	ug/kg							
Aroclor-1260	<10	10	ug/kg							
Aroclor-1268	<10	10	ug/kg							
Surrogate: Decachlorobiphenyl	*2.60*		*ug/kg*	*2.5*		*104*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*1.86*		*ug/kg*	*2.5*		*74.5*	*50-150*			
LCS (B4C2101-BS1)				Prepared & Analyzed: 03/21/14						
Aroclor-1016	**33.0**	10	ug/kg	25		132	60-140		40	
Aroclor-1260	**30.2**	10	ug/kg	25		121	60-140		40	
Surrogate: Decachlorobiphenyl	*2.68*		*ug/kg*	*2.5*		*107*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*2.06*		*ug/kg*	*2.5*		*82.4*	*50-150*			
LCS Dup (B4C2101-BSD1)				Prepared & Analyzed: 03/21/14						
Aroclor-1016	**32.0**	10	ug/kg	25		128	60-140	3.38	40	
Aroclor-1260	**30.0**	10	ug/kg	25		120	60-140	0.831	40	
Surrogate: Decachlorobiphenyl	*2.59*		*ug/kg*	*2.5*		*104*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*1.83*		*ug/kg*	*2.5*		*73.2*	*50-150*			
Matrix Spike (B4C2101-MS1)		**Source: 4C20006-07**		Prepared & Analyzed: 03/21/14						
Aroclor-1016	**67.7**	20	ug/kg	50	<100	135	50-150		40	
Aroclor-1260	**65.7**	20	ug/kg	50	<100	131	50-150		40	
Surrogate: Decachlorobiphenyl	*5.92*		*ug/kg*	*5.0*		*118*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*4.91*		*ug/kg*	*5.0*		*98.2*	*50-150*			
Matrix Spike Dup (B4C2101-MSD1)		**Source: 4C20006-07**		Prepared & Analyzed: 03/21/14						
Aroclor-1016	**67.0**	20	ug/kg	50	<100	134	50-150	1.04	40	
Aroclor-1260	**62.7**	20	ug/kg	50	<100	125	50-150	4.67	40	
Surrogate: Decachlorobiphenyl	*5.11*		*ug/kg*	*5.0*		*102*	*50-150*			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B4C2101 - EPA 3540C										
Matrix Spike Dup (B4C2101-MSD1) Continued			**Source: 4C20006-07**	Prepared & Analyzed: 03/21/14						
Surrogate: Tetrachloro-meta-xylene	*4.38*		*ug/kg*	*5.0*		*87.6*	*50-150*			
VOCs by GC/MS - Quality Control										
Batch B4C2404 - EPA 5030B										
Blank (B4C2404-BLK1)				Prepared & Analyzed: 03/21/14						
Acetone	<50	50	ug/kg							
Benzene	<2.0	2.0	ug/kg							
Bromobenzene	<5.0	5.0	ug/kg							
Bromochloromethane	<5.0	5.0	ug/kg							
Bromodichloromethane	<5.0	5.0	ug/kg							
Bromoform	<5.0	5.0	ug/kg							
Bromomethane	<5.0	5.0	ug/kg							
2-Butanone (MEK)	<50	50	ug/kg							
sec-Butylbenzene	<5.0	5.0	ug/kg							
n-Butylbenzene	<5.0	5.0	ug/kg							
tert-Butylbenzene	<5.0	5.0	ug/kg							
Carbon Disulfide	<5.0	5.0	ug/kg							
Carbon Tetrachloride	<5.0	5.0	ug/kg							
Chlorobenzene	<5.0	5.0	ug/kg							
Chloroethane	<5.0	5.0	ug/kg							
Chloroform	<5.0	5.0	ug/kg							
Chloromethane	<5.0	5.0	ug/kg							
4-Chlorotoluene	<5.0	5.0	ug/kg							
2-Chlorotoluene	<5.0	5.0	ug/kg							
1,2-Dibromo-3-chloropropane	<10	10	ug/kg							
Dibromochloromethane	<5.0	5.0	ug/kg							
1,2-Dibromoethane (EDB)	<5.0	5.0	ug/kg							
Dibromomethane	<5.0	5.0	ug/kg							
1,3-Dichlorobenzene	<5.0	5.0	ug/kg							
1,2-Dichlorobenzene	<5.0	5.0	ug/kg							
1,4-Dichlorobenzene	<5.0	5.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4C2404 - EPA 5030B										
Blank (B4C2404-BLK1) Continued				Prepared & Analyzed: 03/21/14						
Dichlorodifluoromethane (R12)	<5.0	5.0	ug/kg							
1,1-Dichloroethane	<5.0	5.0	ug/kg							
1,2-Dichloroethane (EDC)	<5.0	5.0	ug/kg							
1,1-Dichloroethylene	<5.0	5.0	ug/kg							
trans-1,2-Dichloroethylene	<5.0	5.0	ug/kg							
cis-1,2-Dichloroethylene	<5.0	5.0	ug/kg							
2,2-Dichloropropane	<5.0	5.0	ug/kg							
1,2-Dichloropropane	<5.0	5.0	ug/kg							
1,3-Dichloropropane	<5.0	5.0	ug/kg							
1,1-Dichloropropylene	<5.0	5.0	ug/kg							
cis-1,3-Dichloropropylene	<5.0	5.0	ug/kg							
trans-1,3-Dichloropropylene	<5.0	5.0	ug/kg							
Ethylbenzene	<2.0	2.0	ug/kg							
Hexachlorobutadiene	<10	10	ug/kg							
2-Hexanone (MBK)	<50	50	ug/kg							
Isopropylbenzene	<5.0	5.0	ug/kg							
4-Isopropyltoluene	<5.0	5.0	ug/kg							
Methyl-tert-Butyl Ether (MTBE)	<5.0	5.0	ug/kg							
Methylene Chloride	<50	50	ug/kg							
4-Methyl-2-pentanone (MIBK)	<50	50	ug/kg							
Naphthalene	<10	10	ug/kg							
n-Propylbenzene	<5.0	5.0	ug/kg							
Styrene	<5.0	5.0	ug/kg							
1,1,2,2-Tetrachloroethane	<5.0	5.0	ug/kg							
1,1,1,2-Tetrachloroethane	<5.0	5.0	ug/kg							
Tetrachloroethylene (PCE)	<5.0	5.0	ug/kg							
Toluene	<2.0	2.0	ug/kg							
1,2,4-Trichlorobenzene	<5.0	5.0	ug/kg							
1,2,3-Trichlorobenzene	<5.0	5.0	ug/kg							
1,1,2-Trichloroethane	<5.0	5.0	ug/kg							
1,1,1-Trichloroethane	<5.0	5.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4C2404 - EPA 5030B										
Blank (B4C2404-BLK1) Continued				Prepared & Analyzed: 03/21/14						
Trichloroethylene (TCE)	<5.0	5.0	ug/kg							
Trichlorofluoromethane (R11)	<5.0	5.0	ug/kg							
1,2,3-Trichloropropane	<5.0	5.0	ug/kg							
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<5.0	5.0	ug/kg							
1,2,4-Trimethylbenzene	<5.0	5.0	ug/kg							
1,3,5-Trimethylbenzene	<5.0	5.0	ug/kg							
Vinyl chloride	<5.0	5.0	ug/kg							
o-Xylene	<2.0	2.0	ug/kg							
m,p-Xylenes	<2.0	2.0	ug/kg							
Surrogate: 4-Bromofluorobenzene	*111*		*ug/kg*	*100*		*111*	*70-140*			
Surrogate: Dibromofluoromethane	*107*		*ug/kg*	*100*		*107*	*70-140*			
Surrogate: Toluene-d8	*105*		*ug/kg*	*100*		*105*	*70-140*			
LCS (B4C2404-BS1)				Prepared: 03/21/14 Analyzed: 03/22/14						
Benzene	**43.4**	2.0	ug/kg	40		108	75-125			
Bromodichloromethane	**46.8**	5.0	ug/kg	40		117	75-125			
Bromoform	**38.8**	5.0	ug/kg	40		97.0	75-125			
Carbon Tetrachloride	**38.7**	5.0	ug/kg	40		96.8	75-125			
Chlorobenzene	**38.8**	5.0	ug/kg	40		97.0	75-125			
Chloroethane	**45.4**	5.0	ug/kg	40		113	75-125			
Chloroform	**40.5**	5.0	ug/kg	40		101	75-125			
Chloromethane	**44.5**	5.0	ug/kg	40		111	65-125			
Dibromochloromethane	**37.9**	5.0	ug/kg	40		94.7	75-125			
1,4-Dichlorobenzene	**41.7**	5.0	ug/kg	40		104	75-125			
1,1-Dichloroethane	**37.8**	5.0	ug/kg	40		94.4	70-125			
1,2-Dichloroethane (EDC)	**38.1**	5.0	ug/kg	40		95.4	75-125			
1,1-Dichloroethylene	**42.9**	5.0	ug/kg	40		107	70-130			
trans-1,2-Dichloroethylene	**37.8**	5.0	ug/kg	40		94.4	75-125			
cis-1,2-Dichloroethylene	**43.0**	5.0	ug/kg	40		108	75-125			
1,2-Dichloropropane	**49.0**	5.0	ug/kg	40		123	75-130			
cis-1,3-Dichloropropylene	**50.8**	5.0	ug/kg	40		127	75-125			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4C2404 - EPA 5030B										
LCS (B4C2404-BS1) Continued				Prepared: 03/21/14 Analyzed: 03/22/14						
Ethylbenzene	**37.3**	2.0	ug/kg	40		93.2	75-125			
Methyl-tert-Butyl Ether (MTBE)	**38.2**	5.0	ug/kg	40		95.5	75-125			
Methylene Chloride	**49.6**	50	ug/kg	40		124	75-130			
1,1,2,2-Tetrachloroethane	**46.2**	5.0	ug/kg	40		115	70-135			
Tetrachloroethylene (PCE)	**33.6**	5.0	ug/kg	40		84.0	75-125			
Toluene	**37.2**	2.0	ug/kg	40		93.0	75-125			
1,1,2-Trichloroethane	**44.3**	5.0	ug/kg	40		111	75-125			
1,1,1-Trichloroethane	**37.6**	5.0	ug/kg	40		94.0	75-125			
Trichloroethylene (TCE)	**44.1**	5.0	ug/kg	40		110	75-125			
Vinyl chloride	**31.2**	5.0	ug/kg	40		78.1	75-125			
o-Xylene	**40.5**	2.0	ug/kg	40		101	75-125			
Surrogate: 4-Bromofluorobenzene	*111*		*ug/kg*	*100*		*111*	*70-140*			
Surrogate: Dibromofluoromethane	*108*		*ug/kg*	*100*		*108*	*70-140*			
Surrogate: Toluene-d8	*98.2*		*ug/kg*	*100*		*98.2*	*70-140*			
LCS Dup (B4C2404-BSD1)				Prepared: 03/21/14 Analyzed: 03/22/14						
Benzene	**43.0**	2.0	ug/kg	40		108	75-125	0.741	30	
Bromodichloromethane	**48.1**	5.0	ug/kg	40		120	75-125	2.82	30	
Bromoform	**42.0**	5.0	ug/kg	40		105	75-125	7.97	30	
Carbon Tetrachloride	**39.1**	5.0	ug/kg	40		97.8	75-125	0.976	30	
Chlorobenzene	**40.9**	5.0	ug/kg	40		102	75-125	5.22	30	
Chloroethane	**43.3**	5.0	ug/kg	40		108	75-125	4.60	30	
Chloroform	**42.4**	5.0	ug/kg	40		106	75-125	4.63	30	
Chloromethane	**42.7**	5.0	ug/kg	40		107	65-125	4.13	30	
Dibromochloromethane	**40.8**	5.0	ug/kg	40		102	75-125	7.52	30	
1,4-Dichlorobenzene	**42.2**	5.0	ug/kg	40		106	75-125	1.14	30	
1,1-Dichloroethane	**40.1**	5.0	ug/kg	40		100	70-125	6.01	30	
1,2-Dichloroethane (EDC)	**39.2**	5.0	ug/kg	40		98.0	75-125	2.79	30	
1,1-Dichloroethylene	**41.8**	5.0	ug/kg	40		105	70-130	2.64	30	
trans-1,2-Dichloroethylene	**37.9**	5.0	ug/kg	40		94.8	75-125	0.370	30	
cis-1,2-Dichloroethylene	**44.2**	5.0	ug/kg	40		111	75-125	2.84	30	
1,2-Dichloropropane	**49.3**	5.0	ug/kg	40		123	75-130	0.570	30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4C2404 - EPA 5030B										
LCS Dup (B4C2404-BSD1) Continued				Prepared: 03/21/14 Analyzed: 03/22/14						
cis-1,3-Dichloropropylene	**50.5**	5.0	ug/kg	40		126	75-125	0.513	30	
Ethylbenzene	**39.1**	2.0	ug/kg	40		97.8	75-125	4.82	30	
Methyl-tert-Butyl Ether (MTBE)	**37.9**	5.0	ug/kg	40		94.8	75-125	0.736	30	
Methylene Chloride	**49.4**	50	ug/kg	40		124	75-130	0.242	30	
1,1,2,2-Tetrachloroethane	**52.5**	5.0	ug/kg	40		131	70-135	12.8	30	
Tetrachloroethylene (PCE)	**34.4**	5.0	ug/kg	40		86.0	75-125	2.29	30	
Toluene	**37.7**	2.0	ug/kg	40		94.4	75-125	1.44	30	
1,1,2-Trichloroethane	**46.6**	5.0	ug/kg	40		116	75-125	4.88	30	
1,1,1-Trichloroethane	**38.1**	5.0	ug/kg	40		95.2	75-125	1.27	30	
Trichloroethylene (TCE)	**43.7**	5.0	ug/kg	40		109	75-125	0.957	30	
Vinyl chloride	**33.3**	5.0	ug/kg	40		83.2	75-125	6.38	30	
o-Xylene	**42.3**	2.0	ug/kg	40		106	75-125	4.39	30	
Surrogate: 4-Bromofluorobenzene	*114*		*ug/kg*	*100*		*114*	*70-140*			
Surrogate: Dibromofluoromethane	*110*		*ug/kg*	*100*		*110*	*70-140*			
Surrogate: Toluene-d8	*102*		*ug/kg*	*100*		*102*	*70-140*			
Carbon Chain by GC/FID - Quality Control										
Batch B4C2301 - EPA 3550B										
Blank (B4C2301-BLK1)				Prepared & Analyzed: 03/23/14						
C6-C8	<1.0	1.0	mg/kg							
C8-C10	<1.0	1.0	mg/kg							
C10-C12	<1.0	1.0	mg/kg							
C12-C14	<1.0	1.0	mg/kg							
C14-C16	<1.0	1.0	mg/kg							
C16-C18	<1.0	1.0	mg/kg							
C18-C20	<1.0	1.0	mg/kg							
C20-C22	<1.0	1.0	mg/kg							
C22-C24	<1.0	1.0	mg/kg							
C24-C26	<1.0	1.0	mg/kg							
C26-C28	<1.0	1.0	mg/kg							
C28-C32	<1.0	1.0	mg/kg							
C32-C34	<1.0	1.0	mg/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon Chain by GC/FID - Quality Control										
Batch B4C2301 - EPA 3550B										
Blank (B4C2301-BLK1) Continued				Prepared & Analyzed: 03/23/14						
C34-C36	<1.0	1.0	mg/kg							
C36-C40	<1.0	1.0	mg/kg							
C40-C44	<1.0	1.0	mg/kg							
TPH (C6-C44)	<10	10	mg/kg							
Surrogate: o-Terphenyl	*6.75*		*mg/kg*	*10*		*67.5*	*50-150*			
LCS (B4C2301-BS1)				Prepared & Analyzed: 03/23/14						
Diesel Range Organics as Diesel	**193**	10	mg/kg	200		96.3	75-125		40	
Surrogate: o-Terphenyl	*8.61*		*mg/kg*	*10*		*86.1*	*50-150*			
LCS Dup (B4C2301-BSD1)				Prepared & Analyzed: 03/23/14						
Diesel Range Organics as Diesel	**202**	10	mg/kg	200		101	75-125	4.54	40	
Surrogate: o-Terphenyl	*8.67*		*mg/kg*	*10*		*86.7*	*50-150*			
Total Metals CAM 17 - Quality Control										
Batch B4C2111 - EPA 3050B										
Blank (B4C2111-BLK1)				Prepared & Analyzed: 03/21/14						
Antimony	<10	10	mg/kg							
Arsenic	<0.50	0.50	mg/kg							
Barium	<10	10	mg/kg							
Beryllium	<1.0	1.0	mg/kg							
Cadmium	<1.0	1.0	mg/kg							
Chromium	<3.0	3.0	mg/kg							
Cobalt	<3.0	3.0	mg/kg							
Copper	<3.0	3.0	mg/kg							
Lead	<3.0	3.0	mg/kg							
Molybdenum	<5.0	5.0	mg/kg							
Nickel	<3.0	3.0	mg/kg							
Selenium	<0.50	0.50	mg/kg							
Silver	<1.0	1.0	mg/kg							
Thallium	<5.0	5.0	mg/kg							
Vanadium	<10	10	mg/kg							
Zinc	<3.0	3.0	mg/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4C2111 - EPA 3050B										
LCS (B4C2111-BS1)				Prepared & Analyzed: 03/21/14						
Antimony	**50.1**	10	mg/kg	50		100	80-120			
Arsenic	**56.2**	0.50	mg/kg	50		112	80-120			
Barium	**52.1**	10	mg/kg	50		104	80-120			
Beryllium	**54.7**	1.0	mg/kg	50		109	80-120			
Cadmium	**54.7**	1.0	mg/kg	50		109	80-120			
Chromium	**54.2**	3.0	mg/kg	50		108	80-120			
Cobalt	**55.0**	3.0	mg/kg	50		110	80-120			
Copper	**52.8**	3.0	mg/kg	50		106	80-120			
Lead	**55.4**	3.0	mg/kg	50		111	80-120			
Molybdenum	**53.8**	5.0	mg/kg	50		108	80-120			
Nickel	**54.4**	3.0	mg/kg	50		109	80-120			
Selenium	**55.9**	0.50	mg/kg	50		112	80-120			
Silver	**54.4**	1.0	mg/kg	50		109	80-120			
Thallium	**47.0**	5.0	mg/kg	50		93.9	80-120			
Vanadium	**53.8**	10	mg/kg	50		108	80-120			
Zinc	**57.7**	3.0	mg/kg	50		115	80-120			
LCS Dup (B4C2111-BSD1)				Prepared & Analyzed: 03/21/14						
Antimony	**50.5**	10	mg/kg	50		101	80-120	0.795	20	
Arsenic	**56.8**	0.50	mg/kg	50		114	80-120	0.974	20	
Barium	**52.6**	10	mg/kg	50		105	80-120	0.955	20	
Beryllium	**55.4**	1.0	mg/kg	50		111	80-120	1.36	20	
Cadmium	**55.2**	1.0	mg/kg	50		110	80-120	0.910	20	
Chromium	**54.4**	3.0	mg/kg	50		109	80-120	0.460	20	
Cobalt	**55.0**	3.0	mg/kg	50		110	80-120	0.182	20	
Copper	**53.6**	3.0	mg/kg	50		107	80-120	1.41	20	
Lead	**56.0**	3.0	mg/kg	50		112	80-120	1.08	20	
Molybdenum	**55.0**	5.0	mg/kg	50		110	80-120	2.02	20	
Nickel	**55.2**	3.0	mg/kg	50		110	80-120	1.55	20	
Selenium	**58.2**	0.50	mg/kg	50		116	80-120	4.03	20	
Silver	**54.5**	1.0	mg/kg	50		109	80-120	0.0918	20	
Thallium	**49.0**	5.0	mg/kg	50		98.1	80-120	4.31	20	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4C2111 - EPA 3050B										
LCS Dup (B4C2111-BSD1) Continued				Prepared & Analyzed: 03/21/14						
Vanadium	**53.9**	10	mg/kg	50		108	80-120	0.0928	20	
Zinc	**58.0**	3.0	mg/kg	50		116	80-120	0.519	20	
Matrix Spike (B4C2111-MS1)		**Source: 4C20009-15**		Prepared & Analyzed: 03/21/14						
Antimony	**52.0**	10	mg/kg	50		104	75-125			
Arsenic	**57.0**	0.50	mg/kg	50	1.47	111	75-125			
Barium	**77.8**	10	mg/kg	50	32.5	90.5	75-125			
Beryllium	**54.8**	1.0	mg/kg	50		110	75-125			
Cadmium	**51.6**	1.0	mg/kg	50		103	75-125			
Chromium	**65.2**	3.0	mg/kg	50	10.2	110	75-125			
Cobalt	**57.6**	3.0	mg/kg	50	4.42	106	75-125			
Copper	**58.7**	3.0	mg/kg	50	6.14	105	75-125			
Lead	**57.6**	3.0	mg/kg	50		115	75-125			
Molybdenum	**54.8**	5.0	mg/kg	50		110	75-125			
Nickel	**59.4**	3.0	mg/kg	50	8.00	103	75-125			
Selenium	**56.2**	0.50	mg/kg	50		112	75-125			
Silver	**54.4**	1.0	mg/kg	50		109	75-125			
Thallium	**39.1**	5.0	mg/kg	50		78.2	60-140			
Vanadium	**72.4**	10	mg/kg	50	20.8	103	75-125			
Zinc	**84.0**	3.0	mg/kg	50	34.9	98.4	75-125			
Matrix Spike Dup (B4C2111-MSD1)		**Source: 4C20009-15**		Prepared & Analyzed: 03/21/14						
Antimony	**52.1**	10	mg/kg	50		104	75-125	0.192	40	
Arsenic	**56.0**	0.50	mg/kg	50	1.47	109	75-125	1.59	40	
Barium	**81.5**	10	mg/kg	50	32.5	97.9	75-125	4.65	40	
Beryllium	**54.6**	1.0	mg/kg	50		109	75-125	0.457	40	
Cadmium	**51.4**	1.0	mg/kg	50		103	75-125	0.485	40	
Chromium	**61.4**	3.0	mg/kg	50	10.2	102	75-125	5.92	40	
Cobalt	**57.0**	3.0	mg/kg	50	4.42	105	75-125	0.873	40	
Copper	**58.6**	3.0	mg/kg	50	6.14	105	75-125	0.0852	40	
Lead	**56.9**	3.0	mg/kg	50		114	75-125	1.31	40	
Molybdenum	**53.5**	5.0	mg/kg	50		107	75-125	2.31	40	
Nickel	**58.4**	3.0	mg/kg	50	8.00	101	75-125	1.78	40	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844377
Date Received: 03/20/14
Date Reported: 03/24/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4C2111 - EPA 3050B										
Matrix Spike Dup (B4C2111-MSD1) Continued				**Source: 4C20009-15**	Prepared & Analyzed: 03/21/14					
Selenium	**55.9**	0.50	mg/kg	50		112	75-125	0.624	40	
Silver	**54.8**	1.0	mg/kg	50		110	75-125	0.732	40	
Thallium	**37.4**	5.0	mg/kg	50		74.7	60-140	4.56	40	
Vanadium	**71.8**	10	mg/kg	50	20.8	102	75-125	0.763	40	
Zinc	**92.2**	3.0	mg/kg	50	34.9	115	75-125	9.25	40	
Total Metals CAM 17 - Quality Control										
Batch B4C2110 - EPA 7471A Prep										
Blank (B4C2110-BLK1)				Prepared & Analyzed: 03/21/14						
Mercury	<0.020	0.020	mg/kg							
LCS (B4C2110-BS1)				Prepared & Analyzed: 03/21/14						
Mercury	**0.405**	0.020	mg/kg	0.50		81.0	80-120			
LCS Dup (B4C2110-BSD1)				Prepared & Analyzed: 03/21/14						
Mercury	**0.412**	0.020	mg/kg	0.50		82.3	80-120	1.59	25	
Matrix Spike (B4C2110-MS1)				**Source: 4C20009-15**	Prepared & Analyzed: 03/21/14					
Mercury	**0.390**	0.020	mg/kg	0.50		77.9	75-125			
Matrix Spike Dup (B4C2110-MSD1)				**Source: 4C20009-15**	Prepared & Analyzed: 03/21/14					
Mercury	**0.415**	0.020	mg/kg	0.50		83.0	75-125	6.34	25	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844377
Project No:	0106270030	**Date Received:**	03/20/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	03/24/14

Special Notes

[1] = **S-01** : The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

Viorel Vasile
Operations Manager

CHAIN-OF-CUSTODY RECORD A844377 / 4C20006 119351 **NB** 31290

PROJECT NAME: PECHINEY	American Analytics SH 3/20/14		DATE: 3/20/14 PAGE 1 OF 1
PROJECT NUMBER: 10627 0030	LABORATORY NAME: ~~CAL SCIENCE~~	CLIENT INFORMATION: AMEC IRVINE	REPORTING REQUIREMENTS:
RESULTS TO: LINDA CONLAN	LABORATORY ADDRESS:		
TURNAROUND TIME: 48 HR			
SAMPLE SHIPMENT METHOD: COURIER	LABORATORY CONTACT:		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): KEN CURRUTT, Stephen Hwang

ANALYSES

DATE	TIME	SAMPLE NUMBER	8082 PCBs	8015 TPH	8260 VOC	6010/7471 metals		CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
3/20/14	0732	643-IB-P/S-ES-001	X				AC20006-01	4oz JAR	O			X		1	
	0740	DC-409	X				-02		O			X		1	
	0744	DC-410	X				-03		O			X		1	
	0750	DC-411	X				-04		O			X		1	
	0756	DC-412	X				-05		O			X		1	
	0801	DC-413	X				-06		O			X		1	
	0915	642-IV-P-SS-001	X				-07		S			X		1	
	0919	642-IV-P-SS-002	X				-08		S			X		1	
	0917	642-IV-P-O-001	X	X	X	X	-09		O			X		1	Sludge
	0921	642-IV-P-SS-003	X	X			-10		S			X		1	
	0923	642-IV-P-SS-004	X				-11		S			X		1	
	0925	642-IV-P-SS-005	X				-12		S			X		1	
	0927	642-IV-P-SS-006	X				-13		S			X		1	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature] PRINTED NAME: [illegible] COMPANY: AMEC	3/20/14	0805	SIGNATURE: [signature] PRINTED NAME: STEPHEN Hwang COMPANY: AMEC	3/20/14	0805
SIGNATURE: [signature] PRINTED NAME: Stephen Hwang COMPANY: AMEC	3/20/14	1155	SIGNATURE: [signature] PRINTED NAME: Jorge Perez COMPANY: A.A.	3/20/14	1155
SIGNATURE: [signature] PRINTED NAME: Jorge Perez COMPANY: A.A.	3/20/14	1655	SIGNATURE: [signature] PRINTED NAME: VICTOR VASHE COMPANY:	3/20/14	1655

TOTAL NUMBER OF CONTAINERS: 13

SAMPLING COMMENTS:

PRIORITY

Rush 48 Hrs SH ___

Date 3/20/14 Time 1700 Sign [signature]

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

9765 Eton Avenue
Chatsworth
California 91311
Tel: (818) 998-5547
Fax: (818) 998-7258

May 01, 2014

Linda Conlan

AMEC Environment & Infrastructure, Inc.

121 Innovation Drive, Suite 200

Irvine, CA 92617

Re : Former Pechiney Cast Plate, Inc. / 0106270030

A844395 / 4D29002

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 04/29/14 11:41 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8082 PCBs					
#1005	4D29002-01	Soil	2	04/29/14 06:56	04/29/14 11:41
#1006	4D29002-02	Soil	2	04/29/14 06:58	04/29/14 11:41
#1007	4D29002-03	Soil	2	04/29/14 07:00	04/29/14 11:41
#1008	4D29002-04	Soil	2	04/29/14 07:02	04/29/14 11:41
#1009	4D29002-05	Soil	2	04/29/14 07:03	04/29/14 11:41
#1010	4D29002-06	Soil	2	04/29/14 07:05	04/29/14 11:41
#1011	4D29002-07	Soil	2	04/29/14 07:07	04/29/14 11:41
#1012	4D29002-08	Soil	2	04/29/14 07:09	04/29/14 11:41
#1013	4D29002-09	Soil	2	04/29/14 07:10	04/29/14 11:41
#1014	4D29002-10	Soil	2	04/29/14 07:11	04/29/14 11:41
#1015	4D29002-11	Soil	2	04/29/14 07:13	04/29/14 11:41
8260B					
#1005	4D29002-01	Soil	2	04/29/14 06:56	04/29/14 11:41
#1006	4D29002-02	Soil	2	04/29/14 06:58	04/29/14 11:41
#1007	4D29002-03	Soil	2	04/29/14 07:00	04/29/14 11:41
#1008	4D29002-04	Soil	2	04/29/14 07:02	04/29/14 11:41
#1009	4D29002-05	Soil	2	04/29/14 07:03	04/29/14 11:41
#1010	4D29002-06	Soil	2	04/29/14 07:05	04/29/14 11:41

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
#1011	4D29002-07	Soil	2	04/29/14 07:07	04/29/14 11:41
#1012	4D29002-08	Soil	2	04/29/14 07:09	04/29/14 11:41
#1013	4D29002-09	Soil	2	04/29/14 07:10	04/29/14 11:41
#1014	4D29002-10	Soil	2	04/29/14 07:11	04/29/14 11:41
#1015	4D29002-11	Soil	2	04/29/14 07:13	04/29/14 11:41
CAM Metals Less Hg 6000/7000					
#1005	4D29002-01	Soil	2	04/29/14 06:56	04/29/14 11:41
#1006	4D29002-02	Soil	2	04/29/14 06:58	04/29/14 11:41
#1007	4D29002-03	Soil	2	04/29/14 07:00	04/29/14 11:41
#1008	4D29002-04	Soil	2	04/29/14 07:02	04/29/14 11:41
#1009	4D29002-05	Soil	2	04/29/14 07:03	04/29/14 11:41
#1010	4D29002-06	Soil	2	04/29/14 07:05	04/29/14 11:41
#1011	4D29002-07	Soil	2	04/29/14 07:07	04/29/14 11:41
#1012	4D29002-08	Soil	2	04/29/14 07:09	04/29/14 11:41
#1013	4D29002-09	Soil	2	04/29/14 07:10	04/29/14 11:41
#1014	4D29002-10	Soil	2	04/29/14 07:11	04/29/14 11:41
#1015	4D29002-11	Soil	2	04/29/14 07:13	04/29/14 11:41
Carbon Chain Characterization 8015M					
#1005	4D29002-01	Soil	2	04/29/14 06:56	04/29/14 11:41

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LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
#1006	4D29002-02	Soil	2	04/29/14 06:58	04/29/14 11:41
#1007	4D29002-03	Soil	2	04/29/14 07:00	04/29/14 11:41
#1008	4D29002-04	Soil	2	04/29/14 07:02	04/29/14 11:41
#1009	4D29002-05	Soil	2	04/29/14 07:03	04/29/14 11:41
#1010	4D29002-06	Soil	2	04/29/14 07:05	04/29/14 11:41
#1011	4D29002-07	Soil	2	04/29/14 07:07	04/29/14 11:41
#1012	4D29002-08	Soil	2	04/29/14 07:09	04/29/14 11:41
#1013	4D29002-09	Soil	2	04/29/14 07:10	04/29/14 11:41
#1014	4D29002-10	Soil	2	04/29/14 07:11	04/29/14 11:41
#1015	4D29002-11	Soil	2	04/29/14 07:13	04/29/14 11:41
Mercury Total EPA 7470A/7471A					
#1005	4D29002-01	Soil	2	04/29/14 06:56	04/29/14 11:41
#1006	4D29002-02	Soil	2	04/29/14 06:58	04/29/14 11:41
#1007	4D29002-03	Soil	2	04/29/14 07:00	04/29/14 11:41
#1008	4D29002-04	Soil	2	04/29/14 07:02	04/29/14 11:41
#1009	4D29002-05	Soil	2	04/29/14 07:03	04/29/14 11:41
#1010	4D29002-06	Soil	2	04/29/14 07:05	04/29/14 11:41
#1011	4D29002-07	Soil	2	04/29/14 07:07	04/29/14 11:41
#1012	4D29002-08	Soil	2	04/29/14 07:09	04/29/14 11:41
#1013	4D29002-09	Soil	2	04/29/14 07:10	04/29/14 11:41

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LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
#1014	4D29002-10	Soil	2	04/29/14 07:11	04/29/14 11:41
#1015	4D29002-11	Soil	2	04/29/14 07:13	04/29/14 11:41

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LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/30/14	04/30/14	04/30/14	04/30/14	
AA ID No:	4D29002-01	4D29002-02	4D29002-03	4D29002-04	
Client ID No:	#1005	#1006	#1007	#1008	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	5	5	5	5	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<100	<100	<100	<100	20
Aroclor-1221	<100	<100	<100	<100	20
Aroclor-1232	<100	<100	<100	<100	20
Aroclor-1242	<100	<100	<100	<100	20
Aroclor-1248	<100	**100**	**120**	**160**	20
Aroclor-1254	<100	**140**	**140**	**200**	20
Aroclor-1260	<100	<100	<100	<100	20
Aroclor-1268	<100	<100	<100	<100	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	77%	70%	72%	83%	50-150
Tetrachloro-meta-xylene	89%	77%	74%	72%	50-150

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LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/30/14	04/30/14	04/30/14	04/30/14	
AA ID No:	4D29002-05	4D29002-06	4D29002-07	4D29002-08	
Client ID No:	#1009	#1010	#1011	#1012	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	5	5	5	5	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<100	<100	<100	<100	20
Aroclor-1221	<100	<100	<100	<100	20
Aroclor-1232	<100	<100	<100	<100	20
Aroclor-1242	<100	<100	<100	<100	20
Aroclor-1248	<100	<100	<100	<100	20
Aroclor-1254	<100	<100	<100	<100	20
Aroclor-1260	<100	<100	<100	<100	20
Aroclor-1268	<100	<100	<100	<100	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	110%	87%	85%	89%	50-150
Tetrachloro-meta-xylene	82%	69%	76%	69%	50-150

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LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/30/14	04/30/14	04/30/14	
AA ID No:	4D29002-09	4D29002-10	4D29002-11	
Client ID No:	#1013	#1014	#1015	
Matrix:	Soil	Soil	Soil	
Dilution Factor:	5	5	5	MRL
8082 PCBs (EPA 8082)				
Aroclor-1016	<100	<100	<100	20
Aroclor-1221	<100	<100	<100	20
Aroclor-1232	<100	<100	<100	20
Aroclor-1242	<100	<100	<100	20
Aroclor-1248	**210**	<100	<100	20
Aroclor-1254	<100	<100	<100	20
Aroclor-1260	<100	<100	<100	20
Aroclor-1268	<100	<100	<100	20
Surrogates				**%REC Limits**
Decachlorobiphenyl	100%	81%	101%	50-150
Tetrachloro-meta-xylene	85%	82%	66%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/30/14	04/30/14	04/29/14	
Date Analyzed:	04/29/14	04/30/14	04/30/14	04/29/14	
AA ID No:	4D29002-01	4D29002-02	4D29002-03	4D29002-04	
Client ID No:	#1005	#1006	#1007	#1008	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	100	100	1	MRL
8260B (EPA 8260B)					
Acetone	<50	<2500	<2500	<50	50
Benzene	<2.0	<100	<100	<2.0	2.0
Bromobenzene	<5.0	<250	<250	<5.0	5.0
Bromochloromethane	<5.0	<250	<250	<5.0	5.0
Bromodichloromethane	<5.0	<250	<250	<5.0	5.0
Bromoform	<5.0	<250	<250	<5.0	5.0
Bromomethane	<5.0	<250	<250	<5.0	5.0
2-Butanone (MEK)	<50	<2500	<2500	<50	50
sec-Butylbenzene	<5.0	<250	<250	<5.0	5.0
n-Butylbenzene	<5.0	<250	<250	<5.0	5.0
tert-Butylbenzene	<5.0	<250	<250	<5.0	5.0
Carbon Disulfide	<5.0	<250	<250	<5.0	5.0
Carbon Tetrachloride	<5.0	<250	<250	<5.0	5.0
Chlorobenzene	<5.0	<250	<250	<5.0	5.0
Chloroethane	<5.0	<250	<250	<5.0	5.0
Chloroform	<5.0	<250	<250	<5.0	5.0
Chloromethane	<5.0	<250	<250	<5.0	5.0
4-Chlorotoluene	<5.0	<250	<250	<5.0	5.0
2-Chlorotoluene	<5.0	<250	<250	<5.0	5.0
1,2-Dibromo-3-chloropropane	<10	<500	<500	<10	10
Dibromochloromethane	<5.0	<250	<250	<5.0	5.0
1,2-Dibromoethane (EDB)	<5.0	<250	<250	<5.0	5.0
Dibromomethane	<5.0	<250	<250	<5.0	5.0
1,3-Dichlorobenzene	<5.0	<250	<250	<5.0	5.0
1,2-Dichlorobenzene	<5.0	<250	<250	<5.0	5.0
1,4-Dichlorobenzene	<5.0	<250	<250	<5.0	5.0
Dichlorodifluoromethane (R12)	<5.0	<250	<250	<5.0	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/30/14	04/30/14	04/29/14	
Date Analyzed:	04/29/14	04/30/14	04/30/14	04/29/14	
AA ID No:	4D29002-01	4D29002-02	4D29002-03	4D29002-04	
Client ID No:	#1005	#1006	#1007	#1008	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	100	100	1	MRL
8260B (EPA 8260B) (continued)					
1,1-Dichloroethane	<5.0	<250	<250	<5.0	5.0
1,2-Dichloroethane (EDC)	<5.0	<250	<250	<5.0	5.0
1,1-Dichloroethylene	<5.0	<250	<250	<5.0	5.0
trans-1,2-Dichloroethylene	<5.0	<250	<250	<5.0	5.0
cis-1,2-Dichloroethylene	<5.0	<250	<250	<5.0	5.0
2,2-Dichloropropane	<5.0	<250	<250	<5.0	5.0
1,2-Dichloropropane	<5.0	<250	<250	<5.0	5.0
1,3-Dichloropropane	<5.0	<250	<250	<5.0	5.0
1,1-Dichloropropylene	<5.0	<250	<250	<5.0	5.0
cis-1,3-Dichloropropylene	<5.0	<250	<250	<5.0	5.0
trans-1,3-Dichloropropylene	<5.0	<250	<250	<5.0	5.0
Ethylbenzene	<2.0	<100	<100	<2.0	2.0
Hexachlorobutadiene	<10	<500	<500	<10	10
2-Hexanone (MBK)	<50	<2500	<2500	<50	50
Isopropylbenzene	<5.0	<250	<250	<5.0	5.0
4-Isopropyltoluene	<5.0	<250	<250	<5.0	5.0
Methyl-tert-Butyl Ether (MTBE)	<5.0	<250	<250	<5.0	5.0
Methylene Chloride	<50	<2500	<2500	<50	50
4-Methyl-2-pentanone (MIBK)	<50	<2500	<2500	<50	50
Naphthalene	<10	<500	<500	<10	10
n-Propylbenzene	<5.0	<250	<250	<5.0	5.0
Styrene	<5.0	<250	<250	<5.0	5.0
1,1,2,2-Tetrachloroethane	<5.0	<250	<250	<5.0	5.0
1,1,1,2-Tetrachloroethane	<5.0	<250	<250	<5.0	5.0
Tetrachloroethylene (PCE)	<5.0	<250	<250	<5.0	5.0
Toluene	<2.0	<100	<100	<2.0	2.0
1,2,4-Trichlorobenzene	<5.0	<250	<250	<5.0	5.0

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Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/30/14	04/30/14	04/29/14	
Date Analyzed:	04/29/14	04/30/14	04/30/14	04/29/14	
AA ID No:	4D29002-01	4D29002-02	4D29002-03	4D29002-04	
Client ID No:	#1005	#1006	#1007	#1008	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	100	100	1	MRL
8260B (EPA 8260B) (continued)					
1,2,3-Trichlorobenzene	<5.0	<250	<250	<5.0	5.0
1,1,2-Trichloroethane	<5.0	<250	<250	<5.0	5.0
1,1,1-Trichloroethane	<5.0	<250	<250	<5.0	5.0
Trichloroethylene (TCE)	<5.0	<250	<250	<5.0	5.0
Trichlorofluoromethane (R11)	<5.0	<250	<250	<5.0	5.0
1,2,3-Trichloropropane	<5.0	<250	<250	<5.0	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<5.0	<250	<250	<5.0	5.0
1,2,4-Trimethylbenzene	<5.0	<250	<250	<5.0	5.0
1,3,5-Trimethylbenzene	<5.0	<250	<250	<5.0	5.0
Vinyl chloride	<5.0	<250	<250	<5.0	5.0
o-Xylene	<2.0	<100	<100	<2.0	2.0
m,p-Xylenes	<2.0	<100	<100	<2.0	2.0
Surrogates					**%REC Limits**
4-Bromofluorobenzene	107%	107%	107%	120%	70-140
Dibromofluoromethane	94%	97%	92%	82%	70-140
Toluene-d8	97%	102%	105%	103%	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/30/14	04/30/14	04/30/14	04/30/14	
Date Analyzed:	04/30/14	04/30/14	04/30/14	04/30/14	
AA ID No:	4D29002-05	4D29002-06	4D29002-07	4D29002-08	
Client ID No:	#1009	#1010	#1011	#1012	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	100	100	100	100	MRL
8260B (EPA 8260B)					
Acetone	<2500	<2500	<2500	<2500	50
Benzene	<100	<100	<100	<100	2.0
Bromobenzene	<250	<250	<250	<250	5.0
Bromochloromethane	<250	<250	<250	<250	5.0
Bromodichloromethane	<250	<250	<250	<250	5.0
Bromoform	<250	<250	<250	<250	5.0
Bromomethane	<250	<250	<250	<250	5.0
2-Butanone (MEK)	<2500	<2500	<2500	<2500	50
sec-Butylbenzene	**3200**	<250	<250	**260**	5.0
n-Butylbenzene	**5000**	<250	<250	**640**	5.0
tert-Butylbenzene	**300**	<250	<250	<250	5.0
Carbon Disulfide	<250	<250	<250	<250	5.0
Carbon Tetrachloride	<250	<250	<250	<250	5.0
Chlorobenzene	<250	<250	<250	<250	5.0
Chloroethane	<250	<250	<250	<250	5.0
Chloroform	<250	<250	<250	<250	5.0
Chloromethane	<250	<250	<250	<250	5.0
4-Chlorotoluene	<250	<250	<250	<250	5.0
2-Chlorotoluene	<250	<250	<250	<250	5.0
1,2-Dibromo-3-chloropropane	<500	<500	<500	<500	10
Dibromochloromethane	<250	<250	<250	<250	5.0
1,2-Dibromoethane (EDB)	<250	<250	<250	<250	5.0
Dibromomethane	<250	<250	<250	<250	5.0
1,3-Dichlorobenzene	<250	<250	<250	<250	5.0
1,2-Dichlorobenzene	<250	<250	<250	<250	5.0
1,4-Dichlorobenzene	<250	<250	<250	<250	5.0
Dichlorodifluoromethane (R12)	<250	<250	<250	<250	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/30/14	04/30/14	04/30/14	04/30/14	
Date Analyzed:	04/30/14	04/30/14	04/30/14	04/30/14	
AA ID No:	4D29002-05	4D29002-06	4D29002-07	4D29002-08	
Client ID No:	#1009	#1010	#1011	#1012	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	100	100	100	100	MRL
8260B (EPA 8260B) (continued)					
1,1-Dichloroethane	<250	<250	<250	<250	5.0
1,2-Dichloroethane (EDC)	<250	<250	<250	<250	5.0
1,1-Dichloroethylene	<250	<250	<250	<250	5.0
trans-1,2-Dichloroethylene	<250	<250	<250	<250	5.0
cis-1,2-Dichloroethylene	<250	<250	<250	<250	5.0
2,2-Dichloropropane	<250	<250	<250	<250	5.0
1,2-Dichloropropane	<250	<250	<250	<250	5.0
1,3-Dichloropropane	<250	<250	<250	<250	5.0
1,1-Dichloropropylene	<250	<250	<250	<250	5.0
cis-1,3-Dichloropropylene	<250	<250	<250	<250	5.0
trans-1,3-Dichloropropylene	<250	<250	<250	<250	5.0
Ethylbenzene	<100	<100	<100	<100	2.0
Hexachlorobutadiene	<500	<500	<500	<500	10
2-Hexanone (MBK)	<2500	<2500	<2500	<2500	50
Isopropylbenzene	**390**	<250	<250	<250	5.0
4-Isopropyltoluene	**5300**	**770**	<250	**610**	5.0
Methyl-tert-Butyl Ether (MTBE)	<250	<250	<250	<250	5.0
Methylene Chloride	<2500	<2500	<2500	<2500	50
4-Methyl-2-pentanone (MIBK)	<2500	<2500	<2500	<2500	50
Naphthalene	**590**	<500	<500	<500	10
n-Propylbenzene	**720**	<250	<250	<250	5.0
Styrene	<250	<250	<250	<250	5.0
1,1,2,2-Tetrachloroethane	<250	<250	<250	<250	5.0
1,1,1,2-Tetrachloroethane	<250	<250	<250	<250	5.0
Tetrachloroethylene (PCE)	<250	<250	<250	<250	5.0
Toluene	<100	<100	<100	<100	2.0
1,2,4-Trichlorobenzene	<250	<250	<250	<250	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/30/14	04/30/14	04/30/14	04/30/14	
Date Analyzed:	04/30/14	04/30/14	04/30/14	04/30/14	
AA ID No:	4D29002-05	4D29002-06	4D29002-07	4D29002-08	
Client ID No:	#1009	#1010	#1011	#1012	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	100	100	100	100	MRL
8260B (EPA 8260B) (continued)					
1,2,3-Trichlorobenzene	<250	<250	<250	<250	5.0
1,1,2-Trichloroethane	<250	<250	<250	<250	5.0
1,1,1-Trichloroethane	<250	<250	<250	<250	5.0
Trichloroethylene (TCE)	<250	<250	<250	<250	5.0
Trichlorofluoromethane (R11)	<250	<250	<250	<250	5.0
1,2,3-Trichloropropane	<250	<250	<250	<250	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<250	<250	<250	<250	5.0
1,2,4-Trimethylbenzene	**3500**	<250	<250	**320**	5.0
1,3,5-Trimethylbenzene	**7700**	<250	<250	**640**	5.0
Vinyl chloride	<250	<250	<250	<250	5.0
o-Xylene	<100	<100	<100	<100	2.0
m,p-Xylenes	<100	<100	<100	<100	2.0
Surrogates					**%REC Limits**
4-Bromofluorobenzene	112%	99%	104%	103%	70-140
Dibromofluoromethane	94%	91%	95%	92%	70-140
Toluene-d8	103%	102%	104%	104%	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/30/14	04/30/14	04/30/14	
Date Analyzed:	04/30/14	04/30/14	05/01/14	
AA ID No:	4D29002-09	4D29002-10	4D29002-11	
Client ID No:	#1013	#1014	#1015	
Matrix:	Soil	Soil	Soil	
Dilution Factor:	100	100	100	MRL
8260B (EPA 8260B)				
Acetone	<2500	<2500	<2500	50
Benzene	<100	<100	<100	2.0
Bromobenzene	<250	<250	<250	5.0
Bromochloromethane	<250	<250	<250	5.0
Bromodichloromethane	<250	<250	<250	5.0
Bromoform	<250	<250	<250	5.0
Bromomethane	<250	<250	<250	5.0
2-Butanone (MEK)	<2500	<2500	<2500	50
sec-Butylbenzene	<250	<250	<250	5.0
n-Butylbenzene	<250	<250	<250	5.0
tert-Butylbenzene	<250	<250	<250	5.0
Carbon Disulfide	<250	<250	<250	5.0
Carbon Tetrachloride	<250	<250	<250	5.0
Chlorobenzene	<250	<250	<250	5.0
Chloroethane	<250	<250	<250	5.0
Chloroform	<250	<250	<250	5.0
Chloromethane	<250	<250	<250	5.0
4-Chlorotoluene	<250	<250	<250	5.0
2-Chlorotoluene	<250	<250	<250	5.0
1,2-Dibromo-3-chloropropane	<500	<500	<500	10
Dibromochloromethane	<250	<250	<250	5.0
1,2-Dibromoethane (EDB)	<250	<250	<250	5.0
Dibromomethane	<250	<250	<250	5.0
1,3-Dichlorobenzene	<250	<250	<250	5.0
1,2-Dichlorobenzene	<250	<250	<250	5.0
1,4-Dichlorobenzene	<250	<250	<250	5.0
Dichlorodifluoromethane (R12)	<250	<250	<250	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/30/14	04/30/14	04/30/14	
Date Analyzed:	04/30/14	04/30/14	05/01/14	
AA ID No:	4D29002-09	4D29002-10	4D29002-11	
Client ID No:	#1013	#1014	#1015	
Matrix:	Soil	Soil	Soil	
Dilution Factor:	100	100	100	MRL
8260B (EPA 8260B) (continued)				
1,1-Dichloroethane	<250	<250	<250	5.0
1,2-Dichloroethane (EDC)	<250	<250	<250	5.0
1,1-Dichloroethylene	<250	<250	<250	5.0
trans-1,2-Dichloroethylene	<250	<250	<250	5.0
cis-1,2-Dichloroethylene	<250	<250	<250	5.0
2,2-Dichloropropane	<250	<250	<250	5.0
1,2-Dichloropropane	<250	<250	<250	5.0
1,3-Dichloropropane	<250	<250	<250	5.0
1,1-Dichloropropylene	<250	<250	<250	5.0
cis-1,3-Dichloropropylene	<250	<250	<250	5.0
trans-1,3-Dichloropropylene	<250	<250	<250	5.0
Ethylbenzene	<100	<100	<100	2.0
Hexachlorobutadiene	<500	<500	<500	10
2-Hexanone (MBK)	<2500	<2500	<2500	50
Isopropylbenzene	<250	<250	<250	5.0
4-Isopropyltoluene	<250	<250	<250	5.0
Methyl-tert-Butyl Ether (MTBE)	<250	<250	<250	5.0
Methylene Chloride	<2500	<2500	<2500	50
4-Methyl-2-pentanone (MIBK)	<2500	<2500	<2500	50
Naphthalene	<500	<500	<500	10
n-Propylbenzene	<250	<250	<250	5.0
Styrene	<250	<250	<250	5.0
1,1,2,2-Tetrachloroethane	<250	<250	<250	5.0
1,1,1,2-Tetrachloroethane	<250	<250	<250	5.0
Tetrachloroethylene (PCE)	<250	<250	<250	5.0
Toluene	<100	<100	<100	2.0
1,2,4-Trichlorobenzene	<250	<250	<250	5.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: VOCs by GC/MS

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: ug/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/30/14	04/30/14	04/30/14	
Date Analyzed:	04/30/14	04/30/14	05/01/14	
AA ID No:	4D29002-09	4D29002-10	4D29002-11	
Client ID No:	#1013	#1014	#1015	
Matrix:	Soil	Soil	Soil	
Dilution Factor:	100	100	100	MRL
8260B (EPA 8260B) (continued)				
1,2,3-Trichlorobenzene	<250	<250	<250	5.0
1,1,2-Trichloroethane	<250	<250	<250	5.0
1,1,1-Trichloroethane	<250	<250	<250	5.0
Trichloroethylene (TCE)	<250	<250	<250	5.0
Trichlorofluoromethane (R11)	<250	<250	<250	5.0
1,2,3-Trichloropropane	<250	<250	<250	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<250	<250	<250	5.0
1,2,4-Trimethylbenzene	<250	<250	<250	5.0
1,3,5-Trimethylbenzene	<250	<250	<250	5.0
Vinyl chloride	<250	<250	<250	5.0
o-Xylene	<100	<100	<100	2.0
m,p-Xylenes	<100	<100	<100	2.0
Surrogates				**%REC Limits**
4-Bromofluorobenzene	99%	108%	96%	70-140
Dibromofluoromethane	91%	91%	98%	70-140
Toluene-d8	101%	102%	102%	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Carbon Chain by GC/FID

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/29/14	04/29/14	04/30/14	04/30/14	
AA ID No:	4D29002-01	4D29002-02	4D29002-03	4D29002-04	
Client ID No:	#1005	#1006	#1007	#1008	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Carbon Chain Characterization 8015M (EPA 8015M)					
C6-C8	<1.0	<1.0	<1.0	<1.0	1.0
C8-C10	<1.0	**97**	**91**	**64**	1.0
C10-C12	<1.0	**210**	**210**	**240**	1.0
C12-C14	<1.0	**13**	**4.5**	**18**	1.0
C14-C16	**4.2**	**3.1**	**1.0**	**8.1**	1.0
C16-C18	**6.8**	**14**	**10**	**22**	1.0
C18-C20	**8.3**	**33**	**20**	**27**	1.0
C20-C22	**24**	**64**	**29**	**33**	1.0
C22-C24	**45**	**130**	**58**	**51**	1.0
C24-C26	**50**	**190**	**51**	**54**	1.0
C26-C28	**82**	**230**	**89**	**52**	1.0
C28-C32	**180**	**290**	**120**	**96**	1.0
C32-C34	**77**	**99**	**54**	**41**	1.0
C34-C36	**45**	**41**	**23**	**23**	1.0
C36-C40	**47**	**100**	**51**	**47**	1.0
C40-C44	**25**	**60**	**35**	**32**	1.0
TPH (C6-C44)	**600**	**1600**	**840**	**810**	10
Surrogates					**%REC Limits**
o-Terphenyl	125%	144%	143%	147%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Carbon Chain by GC/FID

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/30/14	04/30/14	04/30/14	04/30/14	
AA ID No:	4D29002-05	4D29002-06	4D29002-07	4D29002-08	
Client ID No:	#1009	#1010	#1011	#1012	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	10	1	1	1	MRL
Carbon Chain Characterization 8015M (EPA 8015M)					
C6-C8	<10	<1.0	<1.0	<1.0	1.0
C8-C10	**2400**	**720**	**170**	**330**	1.0
C10-C12	**2800**	**1000**	**380**	**530**	1.0
C12-C14	**24**	**20**	**8.3**	**28**	1.0
C14-C16	<10	**14**	**2.6**	**19**	1.0
C16-C18	**30**	**47**	**23**	**50**	1.0
C18-C20	**31**	**87**	**40**	**120**	1.0
C20-C22	**46**	**140**	**52**	**220**	1.0
C22-C24	**36**	**280**	**86**	**440**	1.0
C24-C26	**28**	**240**	**66**	**370**	1.0
C26-C28	**45**	**310**	**110**	**440**	1.0
C28-C32	**45**	**340**	**150**	**460**	1.0
C32-C34	**21**	**110**	**58**	**130**	1.0
C34-C36	**14**	**39**	**26**	**31**	1.0
C36-C40	**18**	**72**	**51**	**50**	1.0
C40-C44	**14**	**49**	**44**	**50**	1.0
TPH (C6-C44)	**5500**	**3500**	**1300**	**3300**	10
Surrogates					**%REC Limits**
o-Terphenyl	134%	108%	111%	107%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Carbon Chain by GC/FID

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/30/14	04/30/14	04/30/14	
AA ID No:	4D29002-09	4D29002-10	4D29002-11	
Client ID No:	#1013	#1014	#1015	
Matrix:	Soil	Soil	Soil	
Dilution Factor:	1	1	1	MRL
Carbon Chain Characterization 8015M (EPA 8015M)				
C6-C8	<1.0	<1.0	<1.0	1.0
C8-C10	**270**	**43**	**240**	1.0
C10-C12	**610**	**160**	**600**	1.0
C12-C14	**14**	**11**	**37**	1.0
C14-C16	**18**	**2.1**	**27**	1.0
C16-C18	**69**	**13**	**59**	1.0
C18-C20	**130**	**21**	**80**	1.0
C20-C22	**210**	**33**	**82**	1.0
C22-C24	**380**	**82**	**92**	1.0
C24-C26	**310**	**68**	**77**	1.0
C26-C28	**400**	**120**	**94**	1.0
C28-C32	**440**	**160**	**180**	1.0
C32-C34	**120**	**60**	**76**	1.0
C34-C36	**39**	**25**	**27**	1.0
C36-C40	**77**	**61**	**60**	1.0
C40-C44	**51**	**28**	**41**	1.0
TPH (C6-C44)	**3100**	**890**	**1800**	10
Surrogates				**%REC Limits**
o-Terphenyl	112%	136%	108%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/29/14	04/29/14	04/29/14	04/29/14	
AA ID No:	4D29002-01	4D29002-02	4D29002-03	4D29002-04	
Client ID No:	#1005	#1006	#1007	#1008	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)					
Antimony	<10	<10	<10	<10	10
Arsenic	**2.9**	**1.4**	**1.8**	**1.7**	0.50
Barium	**120**	**89**	**84**	**94**	10
Beryllium	<1.0	<1.0	<1.0	<1.0	1.0
Cadmium	<1.0	<1.0	<1.0	<1.0	1.0
Chromium	**15**	**12**	**10**	**12**	3.0
Cobalt	**10**	**8.3**	**7.2**	**7.7**	3.0
Copper	**24**	**14**	**12**	**14**	3.0
Lead	**19**	**7.9**	**8.4**	**8.4**	3.0
Molybdenum	<5.0	<5.0	<5.0	<5.0	5.0
Nickel	**12**	**8.7**	**7.8**	**8.5**	3.0
Selenium	<0.50	<0.50	<0.50	<0.50	0.50
Silver	<1.0	<1.0	<1.0	<1.0	1.0
Thallium	<5.0	<5.0	<5.0	<5.0	5.0
Vanadium	**40**	**33**	**29**	**33**	10
Zinc	**80**	**61**	**74**	**57**	3.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/29/14	04/29/14	04/29/14	04/29/14	
AA ID No:	4D29002-05	4D29002-06	4D29002-07	4D29002-08	
Client ID No:	#1009	#1010	#1011	#1012	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)					
Antimony	<10	<10	<10	<10	10
Arsenic	**1.5**	**1.0**	**0.75**	**1.8**	0.50
Barium	**120**	**81**	**63**	**87**	10
Beryllium	<1.0	<1.0	<1.0	<1.0	1.0
Cadmium	<1.0	<1.0	<1.0	<1.0	1.0
Chromium	**15**	**11**	**9.1**	**12**	3.0
Cobalt	**10**	**7.6**	**6.0**	**7.6**	3.0
Copper	**18**	**14**	**23**	**21**	3.0
Lead	**5.9**	**7.2**	**7.0**	**8.9**	3.0
Molybdenum	<5.0	<5.0	<5.0	<5.0	5.0
Nickel	**12**	**8.4**	**7.2**	**9.5**	3.0
Selenium	<0.50	<0.50	<0.50	<0.50	0.50
Silver	<1.0	<1.0	<1.0	<1.0	1.0
Thallium	<5.0	<5.0	<5.0	<5.0	5.0
Vanadium	**40**	**31**	**25**	**31**	10
Zinc	**71**	**59**	**65**	**66**	3.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/29/14	04/29/14	04/29/14	
AA ID No:	4D29002-09	4D29002-10	4D29002-11	
Client ID No:	#1013	#1014	#1015	
Matrix:	Soil	Soil	Soil	
Dilution Factor:	1	1	1	MRL
CAM Metals Less Hg 6000/7000 (EPA 6010B/7000)				
Antimony	<10	<10	<10	10
Arsenic	**2.1**	**2.2**	**1.3**	0.50
Barium	**110**	**100**	**90**	10
Beryllium	<1.0	<1.0	<1.0	1.0
Cadmium	<1.0	<1.0	<1.0	1.0
Chromium	**14**	**12**	**11**	3.0
Cobalt	**9.5**	**8.2**	**6.6**	3.0
Copper	**17**	**15**	**23**	3.0
Lead	**9.1**	**5.0**	**8.2**	3.0
Molybdenum	<5.0	<5.0	<5.0	5.0
Nickel	**11**	**9.5**	**8.7**	3.0
Selenium	<0.50	<0.50	<0.50	0.50
Silver	<1.0	<1.0	<1.0	1.0
Thallium	<5.0	<5.0	<5.0	5.0
Vanadium	**38**	**35**	**29**	10
Zinc	**72**	**50**	**52**	3.0

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/29/14	04/29/14	04/29/14	04/29/14	
AA ID No:	4D29002-01	4D29002-02	4D29002-03	4D29002-04	
Client ID No:	#1005	#1006	#1007	#1008	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Mercury Total EPA 7470A/7471A (EPA 7471A)					
Mercury	**0.066**	**0.044**	**0.058**	**0.036**	0.020

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/29/14	04/29/14	04/29/14	04/29/14	
AA ID No:	4D29002-05	4D29002-06	4D29002-07	4D29002-08	
Client ID No:	#1009	#1010	#1011	#1012	
Matrix:	Soil	Soil	Soil	Soil	
Dilution Factor:	1	1	1	1	MRL
Mercury Total EPA 7470A/7471A (EPA 7471A)					
Mercury	**0.16**	**0.032**	**0.058**	**0.046**	0.020

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Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Total Metals CAM 17

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14
Units: mg/kg

Date Sampled:	04/29/14	04/29/14	04/29/14	
Date Prepared:	04/29/14	04/29/14	04/29/14	
Date Analyzed:	04/29/14	04/29/14	04/29/14	
AA ID No:	4D29002-09	4D29002-10	4D29002-11	
Client ID No:	#1013	#1014	#1015	
Matrix:	Soil	Soil	Soil	
Dilution Factor:	1	1	1	MRL
Mercury Total EPA 7470A/7471A (EPA 7471A)				
Mercury	**0.044**	**0.036**	<0.020	0.020

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B4D2915 - EPA 3540C										
Blank (B4D2915-BLK1)				Prepared: 04/29/14	Analyzed: 04/30/14					
Aroclor-1016	<10	10	ug/kg							
Aroclor-1221	<10	10	ug/kg							
Aroclor-1232	<10	10	ug/kg							
Aroclor-1242	<10	10	ug/kg							
Aroclor-1248	<10	10	ug/kg							
Aroclor-1254	<10	10	ug/kg							
Aroclor-1260	<10	10	ug/kg							
Aroclor-1268	<10	10	ug/kg							
Surrogate: Decachlorobiphenyl	*2.57*		*ug/kg*	*2.5*		*103*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*2.95*		*ug/kg*	*2.5*		*118*	*50-150*			
LCS (B4D2915-BS1)				Prepared: 04/29/14	Analyzed: 04/30/14					
Aroclor-1016	**33.9**	10	ug/kg	25		136	60-140		40	
Aroclor-1260	**32.8**	10	ug/kg	25		131	60-140		40	
Surrogate: Decachlorobiphenyl	*2.90*		*ug/kg*	*2.5*		*116*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*2.05*		*ug/kg*	*2.5*		*82.0*	*50-150*			
LCS Dup (B4D2915-BSD1)				Prepared: 04/29/14	Analyzed: 04/30/14					
Aroclor-1016	**34.0**	10	ug/kg	25		136	60-140	0.441	40	
Aroclor-1260	**33.9**	10	ug/kg	25		136	60-140	3.45	40	
Surrogate: Decachlorobiphenyl	*2.92*		*ug/kg*	*2.5*		*117*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*1.94*		*ug/kg*	*2.5*		*77.6*	*50-150*			
Duplicate (B4D2915-DUP1)		**Source: 4D29002-05**		Prepared: 04/29/14	Analyzed: 04/30/14					
Aroclor-1016	**<100**	100	ug/kg		<100				40	
Aroclor-1221	**<100**	100	ug/kg		<100				40	
Aroclor-1232	**<100**	100	ug/kg		<100				40	
Aroclor-1242	**<100**	100	ug/kg		<100				40	
Aroclor-1248	**<100**	100	ug/kg		<100				40	
Aroclor-1254	**<100**	100	ug/kg		<100				40	
Aroclor-1260	**<100**	100	ug/kg		<100				40	
Aroclor-1268	**<100**	100	ug/kg		<100				40	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B4D2915 - EPA 3540C										
Duplicate (B4D2915-DUP1) Continued			**Source: 4D29002-05**	Prepared: 04/29/14		Analyzed: 04/30/14				
Surrogate: Decachlorobiphenyl	*5.12*		*ug/kg*	*5.0*		*102*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*4.07*		*ug/kg*	*5.0*		*81.4*	*50-150*			
VOCs by GC/MS - Quality Control										
Batch B4D2904 - EPA 5035										
Blank (B4D2904-BLK1)				Prepared & Analyzed: 04/29/14						
Acetone	<50	50	ug/kg							
Benzene	<2.0	2.0	ug/kg							
Bromobenzene	<5.0	5.0	ug/kg							
Bromochloromethane	<5.0	5.0	ug/kg							
Bromodichloromethane	<5.0	5.0	ug/kg							
Bromoform	<5.0	5.0	ug/kg							
Bromomethane	<5.0	5.0	ug/kg							
2-Butanone (MEK)	<50	50	ug/kg							
sec-Butylbenzene	<5.0	5.0	ug/kg							
n-Butylbenzene	<5.0	5.0	ug/kg							
tert-Butylbenzene	<5.0	5.0	ug/kg							
Carbon Disulfide	<5.0	5.0	ug/kg							
Carbon Tetrachloride	<5.0	5.0	ug/kg							
Chlorobenzene	<5.0	5.0	ug/kg							
Chloroethane	<5.0	5.0	ug/kg							
Chloroform	<5.0	5.0	ug/kg							
Chloromethane	<5.0	5.0	ug/kg							
4-Chlorotoluene	<5.0	5.0	ug/kg							
2-Chlorotoluene	<5.0	5.0	ug/kg							
1,2-Dibromo-3-chloropropane	<10	10	ug/kg							
Dibromochloromethane	<5.0	5.0	ug/kg							
1,2-Dibromoethane (EDB)	<5.0	5.0	ug/kg							
Dibromomethane	<5.0	5.0	ug/kg							
1,3-Dichlorobenzene	<5.0	5.0	ug/kg							
1,2-Dichlorobenzene	<5.0	5.0	ug/kg							
1,4-Dichlorobenzene	<5.0	5.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D2904 - EPA 5035										
Blank (B4D2904-BLK1) Continued				Prepared & Analyzed: 04/29/14						
Dichlorodifluoromethane (R12)	<5.0	5.0	ug/kg							
1,1-Dichloroethane	<5.0	5.0	ug/kg							
1,2-Dichloroethane (EDC)	<5.0	5.0	ug/kg							
1,1-Dichloroethylene	<5.0	5.0	ug/kg							
trans-1,2-Dichloroethylene	<5.0	5.0	ug/kg							
cis-1,2-Dichloroethylene	<5.0	5.0	ug/kg							
2,2-Dichloropropane	<5.0	5.0	ug/kg							
1,2-Dichloropropane	<5.0	5.0	ug/kg							
1,3-Dichloropropane	<5.0	5.0	ug/kg							
1,1-Dichloropropylene	<5.0	5.0	ug/kg							
cis-1,3-Dichloropropylene	<5.0	5.0	ug/kg							
trans-1,3-Dichloropropylene	<5.0	5.0	ug/kg							
Ethylbenzene	<2.0	2.0	ug/kg							
Hexachlorobutadiene	<10	10	ug/kg							
2-Hexanone (MBK)	<50	50	ug/kg							
Isopropylbenzene	<5.0	5.0	ug/kg							
4-Isopropyltoluene	<5.0	5.0	ug/kg							
Methyl-tert-Butyl Ether (MTBE)	<5.0	5.0	ug/kg							
Methylene Chloride	<50	50	ug/kg							
4-Methyl-2-pentanone (MIBK)	<50	50	ug/kg							
Naphthalene	<10	10	ug/kg							
n-Propylbenzene	<5.0	5.0	ug/kg							
Styrene	<5.0	5.0	ug/kg							
1,1,2,2-Tetrachloroethane	<5.0	5.0	ug/kg							
1,1,1,2-Tetrachloroethane	<5.0	5.0	ug/kg							
Tetrachloroethylene (PCE)	<5.0	5.0	ug/kg							
Toluene	<2.0	2.0	ug/kg							
1,2,4-Trichlorobenzene	<5.0	5.0	ug/kg							
1,2,3-Trichlorobenzene	<5.0	5.0	ug/kg							
1,1,2-Trichloroethane	<5.0	5.0	ug/kg							
1,1,1-Trichloroethane	<5.0	5.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D2904 - EPA 5035										
Blank (B4D2904-BLK1) Continued				Prepared & Analyzed: 04/29/14						
Trichloroethylene (TCE)	<5.0	5.0	ug/kg							
Trichlorofluoromethane (R11)	<5.0	5.0	ug/kg							
1,2,3-Trichloropropane	<5.0	5.0	ug/kg							
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<5.0	5.0	ug/kg							
1,2,4-Trimethylbenzene	<5.0	5.0	ug/kg							
1,3,5-Trimethylbenzene	<5.0	5.0	ug/kg							
Vinyl chloride	<5.0	5.0	ug/kg							
o-Xylene	<2.0	2.0	ug/kg							
m,p-Xylenes	<2.0	2.0	ug/kg							
Surrogate: 4-Bromofluorobenzene	*104*		*ug/kg*	*100*		*104*	*70-140*			
Surrogate: Dibromofluoromethane	*90.8*		*ug/kg*	*100*		*90.8*	*70-140*			
Surrogate: Toluene-d8	*96.8*		*ug/kg*	*100*		*96.8*	*70-140*			
LCS (B4D2904-BS1)				Prepared & Analyzed: 04/29/14						
Benzene	**46.7**	2.0	ug/kg	40		117	75-125			
Bromodichloromethane	**50.0**	5.0	ug/kg	40		125	75-125			
Bromoform	**44.0**	5.0	ug/kg	40		110	75-125			
Carbon Tetrachloride	**49.0**	5.0	ug/kg	40		123	75-125			
Chlorobenzene	**44.2**	5.0	ug/kg	40		111	75-125			
Chloroethane	**40.9**	5.0	ug/kg	40		102	75-125			
Chloroform	**47.0**	5.0	ug/kg	40		118	75-125			
Chloromethane	**33.0**	5.0	ug/kg	40		82.6	65-125			
Dibromochloromethane	**45.0**	5.0	ug/kg	40		112	75-125			
1,4-Dichlorobenzene	**52.6**	5.0	ug/kg	40		131	75-125			
1,1-Dichloroethane	**45.4**	5.0	ug/kg	40		113	70-125			
1,2-Dichloroethane (EDC)	**44.2**	5.0	ug/kg	40		110	75-125			
1,1-Dichloroethylene	**45.1**	5.0	ug/kg	40		113	70-130			
trans-1,2-Dichloroethylene	**48.2**	5.0	ug/kg	40		120	75-125			
cis-1,2-Dichloroethylene	**47.8**	5.0	ug/kg	40		120	75-125			
1,2-Dichloropropane	**47.3**	5.0	ug/kg	40		118	75-130			
cis-1,3-Dichloropropylene	**45.8**	5.0	ug/kg	40		115	75-125			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D2904 - EPA 5035										
LCS (B4D2904-BS1) Continued				Prepared & Analyzed: 04/29/14						
Ethylbenzene	**46.6**	2.0	ug/kg	40		116	75-125			
Methyl-tert-Butyl Ether (MTBE)	**51.2**	5.0	ug/kg	40		128	75-125			
Methylene Chloride	**45.7**	50	ug/kg	40		114	75-130			
1,1,2,2-Tetrachloroethane	**46.1**	5.0	ug/kg	40		115	70-135			
Tetrachloroethylene (PCE)	**45.9**	5.0	ug/kg	40		115	75-125			
Toluene	**44.1**	2.0	ug/kg	40		110	75-125			
1,1,2-Trichloroethane	**46.9**	5.0	ug/kg	40		117	75-125			
1,1,1-Trichloroethane	**50.8**	5.0	ug/kg	40		127	75-125			
Trichloroethylene (TCE)	**47.7**	5.0	ug/kg	40		119	75-125			
Vinyl chloride	**32.6**	5.0	ug/kg	40		81.4	75-125			
o-Xylene	**44.0**	2.0	ug/kg	40		110	75-125			
Surrogate: 4-Bromofluorobenzene	*91.6*		*ug/kg*	*100*		*91.6*	*70-140*			
Surrogate: Dibromofluoromethane	*93.0*		*ug/kg*	*100*		*93.0*	*70-140*			
Surrogate: Toluene-d8	*92.0*		*ug/kg*	*100*		*92.0*	*70-140*			
LCS Dup (B4D2904-BSD1)				Prepared & Analyzed: 04/29/14						
Benzene	**42.2**	2.0	ug/kg	40		106	75-125	10.0	30	
Bromodichloromethane	**42.9**	5.0	ug/kg	40		107	75-125	15.1	30	
Bromoform	**38.5**	5.0	ug/kg	40		96.3	75-125	13.3	30	
Carbon Tetrachloride	**40.9**	5.0	ug/kg	40		102	75-125	18.2	30	
Chlorobenzene	**43.6**	5.0	ug/kg	40		109	75-125	1.46	30	
Chloroethane	**31.9**	5.0	ug/kg	40		79.8	75-125	24.7	30	
Chloroform	**41.1**	5.0	ug/kg	40		103	75-125	13.5	30	
Chloromethane	**25.1**	5.0	ug/kg	40		62.8	65-125	27.2	30	
Dibromochloromethane	**38.3**	5.0	ug/kg	40		95.6	75-125	16.2	30	
1,4-Dichlorobenzene	**49.6**	5.0	ug/kg	40		124	75-125	5.91	30	
1,1-Dichloroethane	**36.5**	5.0	ug/kg	40		91.2	70-125	21.6	30	
1,2-Dichloroethane (EDC)	**38.7**	5.0	ug/kg	40		96.6	75-125	13.3	30	
1,1-Dichloroethylene	**38.0**	5.0	ug/kg	40		95.1	70-130	16.9	30	
trans-1,2-Dichloroethylene	**40.9**	5.0	ug/kg	40		102	75-125	16.3	30	
cis-1,2-Dichloroethylene	**42.1**	5.0	ug/kg	40		105	75-125	12.7	30	
1,2-Dichloropropane	**41.8**	5.0	ug/kg	40		104	75-130	12.4	30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D2904 - EPA 5035										
LCS Dup (B4D2904-BSD1) Continued				Prepared & Analyzed: 04/29/14						
cis-1,3-Dichloropropylene	**38.2**	5.0	ug/kg	40		95.6	75-125	18.1	30	
Ethylbenzene	**45.3**	2.0	ug/kg	40		113	75-125	2.70	30	
Methyl-tert-Butyl Ether (MTBE)	**43.6**	5.0	ug/kg	40		109	75-125	15.9	30	
Methylene Chloride	**39.0**	50	ug/kg	40		97.4	75-130	15.8	30	
1,1,2,2-Tetrachloroethane	**40.6**	5.0	ug/kg	40		101	70-135	12.7	30	
Tetrachloroethylene (PCE)	**43.4**	5.0	ug/kg	40		109	75-125	5.42	30	
Toluene	**43.6**	2.0	ug/kg	40		109	75-125	0.958	30	
1,1,2-Trichloroethane	**42.0**	5.0	ug/kg	40		105	75-125	10.8	30	
1,1,1-Trichloroethane	**44.3**	5.0	ug/kg	40		111	75-125	13.7	30	
Trichloroethylene (TCE)	**43.9**	5.0	ug/kg	40		110	75-125	8.21	30	
Vinyl chloride	**24.7**	5.0	ug/kg	40		61.6	75-125	27.7	30	
o-Xylene	**41.4**	2.0	ug/kg	40		104	75-125	5.95	30	
Surrogate: 4-Bromofluorobenzene	*107*		*ug/kg*	*100*		*107*	*70-140*			
Surrogate: Dibromofluoromethane	*86.3*		*ug/kg*	*100*		*86.3*	*70-140*			
Surrogate: Toluene-d8	*89.5*		*ug/kg*	*100*		*89.5*	*70-140*			
Matrix Spike (B4D2904-MS1)			**Source: 4D29002-01**	Prepared & Analyzed: 04/29/14						
Benzene	**38.0**	2.0	ug/kg	40	<2.0	94.9	70-130			
Bromoform	**36.8**	5.0	ug/kg	40	<5.0	92.0	70-130			
Chlorobenzene	**42.6**	5.0	ug/kg	40	<5.0	107	70-130			
Chloroform	**36.1**	5.0	ug/kg	40	<5.0	90.4	70-130			
1,1-Dichloroethane	**31.9**	5.0	ug/kg	40	<5.0	79.6	70-130			
1,1-Dichloroethylene	**35.0**	5.0	ug/kg	40	<5.0	87.4	70-130			
cis-1,2-Dichloroethylene	**38.4**	5.0	ug/kg	40	<5.0	95.9	70-130			
1,2-Dichloropropane	**38.2**	5.0	ug/kg	40	<5.0	95.4	70-130			
Ethylbenzene	**43.9**	2.0	ug/kg	40	<2.0	110	70-130			
Methyl-tert-Butyl Ether (MTBE)	**39.6**	5.0	ug/kg	40	<5.0	99.1	70-130			
n-Propylbenzene	**47.5**	5.0	ug/kg	40	<5.0	119	70-130			
Tetrachloroethylene (PCE)	**40.8**	5.0	ug/kg	40	<5.0	102	70-130			
Toluene	**42.5**	2.0	ug/kg	40	<2.0	106	70-130			
1,1,1-Trichloroethane	**40.2**	5.0	ug/kg	40	<5.0	100	70-130			
Trichloroethylene (TCE)	**43.6**	5.0	ug/kg	40	<5.0	109	70-130			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D2904 - EPA 5035										
Matrix Spike (B4D2904-MS1) Continued Source: 4D29002-01 Prepared & Analyzed: 04/29/14										
1,3,5-Trimethylbenzene	**42.4**	5.0	ug/kg	40	<5.0	106	70-130			
Vinyl chloride	**22.8**	5.0	ug/kg	40	<5.0	57.0	70-130			
Surrogate: 4-Bromofluorobenzene	*105*		*ug/kg*	*100*		*105*	*70-140*			
Surrogate: Dibromofluoromethane	*79.3*		*ug/kg*	*100*		*79.3*	*70-140*			
Surrogate: Toluene-d8	*95.8*		*ug/kg*	*100*		*95.8*	*70-140*			
Matrix Spike Dup (B4D2904-MSD1) Source: 4D29002-01 Prepared & Analyzed: 04/29/14										
Benzene	**42.4**	2.0	ug/kg	40	<2.0	106	70-130	11.0	40	
Bromoform	**42.4**	5.0	ug/kg	40	<5.0	106	70-130	14.0	40	
Chlorobenzene	**49.3**	5.0	ug/kg	40	<5.0	123	70-130	14.6	40	
Chloroform	**40.4**	5.0	ug/kg	40	<5.0	101	70-130	11.1	40	
1,1-Dichloroethane	**35.9**	5.0	ug/kg	40	<5.0	89.8	70-130	11.9	40	
1,1-Dichloroethylene	**38.2**	5.0	ug/kg	40	<5.0	95.6	70-130	8.85	40	
cis-1,2-Dichloroethylene	**42.7**	5.0	ug/kg	40	<5.0	107	70-130	10.8	40	
1,2-Dichloropropane	**41.7**	5.0	ug/kg	40	<5.0	104	70-130	8.87	40	
Ethylbenzene	**51.4**	2.0	ug/kg	40	<2.0	128	70-130	15.6	40	
Methyl-tert-Butyl Ether (MTBE)	**31.0**	5.0	ug/kg	40	<5.0	77.4	70-130	24.6	40	
n-Propylbenzene	**64.9**	5.0	ug/kg	40	<5.0	162	70-130	30.9	40	
Tetrachloroethylene (PCE)	**48.9**	5.0	ug/kg	40	<5.0	122	70-130	18.1	40	
Toluene	**49.2**	2.0	ug/kg	40	<2.0	123	70-130	14.6	40	
1,1,1-Trichloroethane	**45.1**	5.0	ug/kg	40	<5.0	113	70-130	11.6	40	
Trichloroethylene (TCE)	**50.2**	5.0	ug/kg	40	<5.0	126	70-130	14.2	40	
1,3,5-Trimethylbenzene	**61.2**	5.0	ug/kg	40	<5.0	153	70-130	36.3	40	
Vinyl chloride	**27.4**	5.0	ug/kg	40	<5.0	68.6	70-130	18.4	40	
Surrogate: 4-Bromofluorobenzene	*115*		*ug/kg*	*100*		*115*	*70-140*			
Surrogate: Dibromofluoromethane	*83.1*		*ug/kg*	*100*		*83.1*	*70-140*			
Surrogate: Toluene-d8	*99.4*		*ug/kg*	*100*		*99.4*	*70-140*			
Batch B4D3011 - EPA 5035										
Blank (B4D3011-BLK1) Prepared & Analyzed: 04/30/14										
Acetone	<50	50	ug/kg							
Benzene	<2.0	2.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D3011 - EPA 5035										
Blank (B4D3011-BLK1) Continued				Prepared & Analyzed: 04/30/14						
Bromobenzene	<5.0	5.0	ug/kg							
Bromochloromethane	<5.0	5.0	ug/kg							
Bromodichloromethane	<5.0	5.0	ug/kg							
Bromoform	<5.0	5.0	ug/kg							
Bromomethane	<5.0	5.0	ug/kg							
2-Butanone (MEK)	<50	50	ug/kg							
sec-Butylbenzene	<5.0	5.0	ug/kg							
n-Butylbenzene	<5.0	5.0	ug/kg							
tert-Butylbenzene	<5.0	5.0	ug/kg							
Carbon Disulfide	<5.0	5.0	ug/kg							
Carbon Tetrachloride	<5.0	5.0	ug/kg							
Chlorobenzene	<5.0	5.0	ug/kg							
Chloroethane	<5.0	5.0	ug/kg							
Chloroform	<5.0	5.0	ug/kg							
Chloromethane	<5.0	5.0	ug/kg							
4-Chlorotoluene	<5.0	5.0	ug/kg							
2-Chlorotoluene	<5.0	5.0	ug/kg							
1,2-Dibromo-3-chloropropane	<10	10	ug/kg							
Dibromochloromethane	<5.0	5.0	ug/kg							
1,2-Dibromoethane (EDB)	<5.0	5.0	ug/kg							
Dibromomethane	<5.0	5.0	ug/kg							
1,3-Dichlorobenzene	<5.0	5.0	ug/kg							
1,2-Dichlorobenzene	<5.0	5.0	ug/kg							
1,4-Dichlorobenzene	<5.0	5.0	ug/kg							
Dichlorodifluoromethane (R12)	<5.0	5.0	ug/kg							
1,1-Dichloroethane	<5.0	5.0	ug/kg							
1,2-Dichloroethane (EDC)	<5.0	5.0	ug/kg							
1,1-Dichloroethylene	<5.0	5.0	ug/kg							
trans-1,2-Dichloroethylene	<5.0	5.0	ug/kg							
cis-1,2-Dichloroethylene	<5.0	5.0	ug/kg							
2,2-Dichloropropane	<5.0	5.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D3011 - EPA 5035										
Blank (B4D3011-BLK1) Continued				Prepared & Analyzed: 04/30/14						
1,2-Dichloropropane	<5.0	5.0	ug/kg							
1,3-Dichloropropane	<5.0	5.0	ug/kg							
1,1-Dichloropropylene	<5.0	5.0	ug/kg							
cis-1,3-Dichloropropylene	<5.0	5.0	ug/kg							
trans-1,3-Dichloropropylene	<5.0	5.0	ug/kg							
Ethylbenzene	<2.0	2.0	ug/kg							
Hexachlorobutadiene	<10	10	ug/kg							
2-Hexanone (MBK)	<50	50	ug/kg							
Isopropylbenzene	<5.0	5.0	ug/kg							
4-Isopropyltoluene	<5.0	5.0	ug/kg							
Methyl-tert-Butyl Ether (MTBE)	<5.0	5.0	ug/kg							
Methylene Chloride	<50	50	ug/kg							
4-Methyl-2-pentanone (MIBK)	<50	50	ug/kg							
Naphthalene	<10	10	ug/kg							
n-Propylbenzene	<5.0	5.0	ug/kg							
Styrene	<5.0	5.0	ug/kg							
1,1,2,2-Tetrachloroethane	<5.0	5.0	ug/kg							
1,1,1,2-Tetrachloroethane	<5.0	5.0	ug/kg							
Tetrachloroethylene (PCE)	<5.0	5.0	ug/kg							
Toluene	<2.0	2.0	ug/kg							
1,2,4-Trichlorobenzene	<5.0	5.0	ug/kg							
1,2,3-Trichlorobenzene	<5.0	5.0	ug/kg							
1,1,2-Trichloroethane	<5.0	5.0	ug/kg							
1,1,1-Trichloroethane	<5.0	5.0	ug/kg							
Trichloroethylene (TCE)	<5.0	5.0	ug/kg							
Trichlorofluoromethane (R11)	<5.0	5.0	ug/kg							
1,2,3-Trichloropropane	<5.0	5.0	ug/kg							
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<5.0	5.0	ug/kg							
1,2,4-Trimethylbenzene	<5.0	5.0	ug/kg							
1,3,5-Trimethylbenzene	<5.0	5.0	ug/kg							
Vinyl chloride	<5.0	5.0	ug/kg							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D3011 - EPA 5035										
Blank (B4D3011-BLK1) Continued				Prepared & Analyzed: 04/30/14						
o-Xylene	<2.0	2.0	ug/kg							
m,p-Xylenes	<2.0	2.0	ug/kg							
Surrogate: 4-Bromofluorobenzene	*97.8*		*ug/kg*	*100*		*97.8*	*70-140*			
Surrogate: Dibromofluoromethane	*76.0*		*ug/kg*	*100*		*76.0*	*70-140*			
Surrogate: Toluene-d8	*110*		*ug/kg*	*100*		*110*	*70-140*			
LCS (B4D3011-BS1)				Prepared & Analyzed: 04/30/14						
Benzene	**39.5**	2.0	ug/kg	40		98.8	75-125			
Bromodichloromethane	**43.8**	5.0	ug/kg	40		109	75-125			
Bromoform	**44.7**	5.0	ug/kg	40		112	75-125			
Carbon Tetrachloride	**38.0**	5.0	ug/kg	40		95.0	75-125			
Chlorobenzene	**40.8**	5.0	ug/kg	40		102	75-125			
Chloroethane	**43.7**	5.0	ug/kg	40		109	75-125			
Chloroform	**35.8**	5.0	ug/kg	40		89.4	75-125			
Chloromethane	**41.0**	5.0	ug/kg	40		102	65-125			
Dibromochloromethane	**41.2**	5.0	ug/kg	40		103	75-125			
1,4-Dichlorobenzene	**45.3**	5.0	ug/kg	40		113	75-125			
1,1-Dichloroethane	**37.8**	5.0	ug/kg	40		94.4	70-125			
1,2-Dichloroethane (EDC)	**35.6**	5.0	ug/kg	40		88.9	75-125			
1,1-Dichloroethylene	**40.0**	5.0	ug/kg	40		100	70-130			
trans-1,2-Dichloroethylene	**42.5**	5.0	ug/kg	40		106	75-125			
cis-1,2-Dichloroethylene	**43.6**	5.0	ug/kg	40		109	75-125			
1,2-Dichloropropane	**43.4**	5.0	ug/kg	40		109	75-130			
cis-1,3-Dichloropropylene	**40.1**	5.0	ug/kg	40		100	75-125			
Ethylbenzene	**37.7**	2.0	ug/kg	40		94.2	75-125			
Methyl-tert-Butyl Ether (MTBE)	**38.8**	5.0	ug/kg	40		97.0	75-125			
Methylene Chloride	**43.4**	50	ug/kg	40		108	75-130			
1,1,2,2-Tetrachloroethane	**48.5**	5.0	ug/kg	40		121	70-135			
Tetrachloroethylene (PCE)	**38.1**	5.0	ug/kg	40		95.3	75-125			
Toluene	**38.9**	2.0	ug/kg	40		97.2	75-125			
1,1,2-Trichloroethane	**45.2**	5.0	ug/kg	40		113	75-125			
1,1,1-Trichloroethane	**37.0**	5.0	ug/kg	40		92.4	75-125			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D3011 - EPA 5035										
LCS (B4D3011-BS1) Continued				Prepared & Analyzed: 04/30/14						
Trichloroethylene (TCE)	**42.1**	5.0	ug/kg	40		105	75-125			
Vinyl chloride	**32.0**	5.0	ug/kg	40		80.0	75-125			
o-Xylene	**40.9**	2.0	ug/kg	40		102	75-125			
Surrogate: 4-Bromofluorobenzene	*101*		*ug/kg*	*100*		*101*	*70-140*			
Surrogate: Dibromofluoromethane	*95.3*		*ug/kg*	*100*		*95.3*	*70-140*			
Surrogate: Toluene-d8	*95.6*		*ug/kg*	*100*		*95.6*	*70-140*			
LCS Dup (B4D3011-BSD1)				Prepared: 04/30/14 Analyzed: 05/01/14						
Benzene	**41.3**	2.0	ug/kg	40		103	75-125	4.40	30	
Bromodichloromethane	**43.9**	5.0	ug/kg	40		110	75-125	0.319	30	
Bromoform	**41.2**	5.0	ug/kg	40		103	75-125	8.24	30	
Carbon Tetrachloride	**40.2**	5.0	ug/kg	40		100	75-125	5.68	30	
Chlorobenzene	**40.6**	5.0	ug/kg	40		102	75-125	0.393	30	
Chloroethane	**45.6**	5.0	ug/kg	40		114	75-125	4.12	30	
Chloroform	**38.6**	5.0	ug/kg	40		96.4	75-125	7.48	30	
Chloromethane	**42.4**	5.0	ug/kg	40		106	65-125	3.36	30	
Dibromochloromethane	**38.9**	5.0	ug/kg	40		97.4	75-125	5.54	30	
1,4-Dichlorobenzene	**42.4**	5.0	ug/kg	40		106	75-125	6.57	30	
1,1-Dichloroethane	**40.9**	5.0	ug/kg	40		102	70-125	7.88	30	
1,2-Dichloroethane (EDC)	**33.3**	5.0	ug/kg	40		83.2	75-125	6.56	30	
1,1-Dichloroethylene	**41.7**	5.0	ug/kg	40		104	70-130	4.12	30	
trans-1,2-Dichloroethylene	**44.5**	5.0	ug/kg	40		111	75-125	4.69	30	
cis-1,2-Dichloroethylene	**45.1**	5.0	ug/kg	40		113	75-125	3.34	30	
1,2-Dichloropropane	**44.4**	5.0	ug/kg	40		111	75-130	2.28	30	
cis-1,3-Dichloropropylene	**46.3**	5.0	ug/kg	40		116	75-125	14.4	30	
Ethylbenzene	**38.0**	2.0	ug/kg	40		95.0	75-125	0.899	30	
Methyl-tert-Butyl Ether (MTBE)	**38.0**	5.0	ug/kg	40		95.0	75-125	2.08	30	
Methylene Chloride	**46.9**	50	ug/kg	40		117	75-130	7.76	30	
1,1,2,2-Tetrachloroethane	**44.9**	5.0	ug/kg	40		112	70-135	7.58	30	
Tetrachloroethylene (PCE)	**40.0**	5.0	ug/kg	40		99.9	75-125	4.71	30	
Toluene	**39.4**	2.0	ug/kg	40		98.4	75-125	1.23	30	
1,1,2-Trichloroethane	**41.7**	5.0	ug/kg	40		104	75-125	8.20	30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs by GC/MS - Quality Control										
Batch B4D3011 - EPA 5035										
LCS Dup (B4D3011-BSD1) Continued				Prepared: 04/30/14 Analyzed: 05/01/14						
1,1,1-Trichloroethane	**38.6**	5.0	ug/kg	40		96.5	75-125	4.29	30	
Trichloroethylene (TCE)	**43.0**	5.0	ug/kg	40		108	75-125	2.12	30	
Vinyl chloride	**32.6**	5.0	ug/kg	40		81.4	75-125	1.67	30	
o-Xylene	**41.8**	2.0	ug/kg	40		105	75-125	2.27	30	
Surrogate: 4-Bromofluorobenzene	*107*		*ug/kg*	*100*		*107*	*70-140*			
Surrogate: Dibromofluoromethane	*101*		*ug/kg*	*100*		*101*	*70-140*			
Surrogate: Toluene-d8	*99.3*		*ug/kg*	*100*		*99.3*	*70-140*			
Carbon Chain by GC/FID - Quality Control										
Batch B4D2916 - EPA 3550B										
Blank (B4D2916-BLK1)				Prepared & Analyzed: 04/29/14						
C6-C8	<1.0	1.0	mg/kg							
C8-C10	<1.0	1.0	mg/kg							
C10-C12	<1.0	1.0	mg/kg							
C12-C14	<1.0	1.0	mg/kg							
C14-C16	<1.0	1.0	mg/kg							
C16-C18	<1.0	1.0	mg/kg							
C18-C20	<1.0	1.0	mg/kg							
C20-C22	<1.0	1.0	mg/kg							
C22-C24	<1.0	1.0	mg/kg							
C24-C26	<1.0	1.0	mg/kg							
C26-C28	<1.0	1.0	mg/kg							
C28-C32	<1.0	1.0	mg/kg							
C32-C34	<1.0	1.0	mg/kg							
C34-C36	<1.0	1.0	mg/kg							
C36-C40	<1.0	1.0	mg/kg							
C40-C44	<1.0	1.0	mg/kg							
TPH (C6-C44)	<10	10	mg/kg							
Surrogate: o-Terphenyl	*10.2*		*mg/kg*	*10*		*102*	*50-150*			
LCS (B4D2916-BS1)				Prepared & Analyzed: 04/29/14						
Diesel Range Organics as Diesel	**228**	10	mg/kg	200		114	75-125		40	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon Chain by GC/FID - Quality Control										
Batch B4D2916 - EPA 3550B										
LCS (B4D2916-BS1) Continued				Prepared & Analyzed: 04/29/14						
Surrogate: o-Terphenyl	*11.9*		*mg/kg*	*10*		*119*	*50-150*			
LCS Dup (B4D2916-BSD1)				Prepared & Analyzed: 04/29/14						
Diesel Range Organics as Diesel	**239**	10	mg/kg	200		120	75-125	4.56	40	
Surrogate: o-Terphenyl	*12.0*		*mg/kg*	*10*		*120*	*50-150*			
Total Metals CAM 17 - Quality Control										
Batch B4D2911 - EPA 3050B										
Blank (B4D2911-BLK1)				Prepared & Analyzed: 04/29/14						
Antimony	<10	10	mg/kg							
Arsenic	<0.50	0.50	mg/kg							
Barium	<10	10	mg/kg							
Beryllium	<1.0	1.0	mg/kg							
Cadmium	<1.0	1.0	mg/kg							
Chromium	<3.0	3.0	mg/kg							
Cobalt	<3.0	3.0	mg/kg							
Copper	<3.0	3.0	mg/kg							
Lead	<3.0	3.0	mg/kg							
Molybdenum	<5.0	5.0	mg/kg							
Nickel	<3.0	3.0	mg/kg							
Selenium	<0.50	0.50	mg/kg							
Silver	<1.0	1.0	mg/kg							
Thallium	<5.0	5.0	mg/kg							
Vanadium	<10	10	mg/kg							
Zinc	<3.0	3.0	mg/kg							
LCS (B4D2911-BS1)				Prepared & Analyzed: 04/29/14						
Antimony	**46.5**	10	mg/kg	50		93.0	80-120			
Arsenic	**49.9**	0.50	mg/kg	50		99.8	80-120			
Barium	**49.2**	10	mg/kg	50		98.5	80-120			
Beryllium	**47.1**	1.0	mg/kg	50		94.2	80-120			
Cadmium	**49.4**	1.0	mg/kg	50		98.8	80-120			
Chromium	**48.9**	3.0	mg/kg	50		97.8	80-120			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4D2911 - EPA 3050B										
LCS (B4D2911-BS1) Continued				Prepared & Analyzed: 04/29/14						
Cobalt	**49.6**	3.0	mg/kg	50		99.1	80-120			
Copper	**48.3**	3.0	mg/kg	50		96.7	80-120			
Lead	**49.4**	3.0	mg/kg	50		98.9	80-120			
Molybdenum	**48.5**	5.0	mg/kg	50		97.0	80-120			
Nickel	**49.8**	3.0	mg/kg	50		99.6	80-120			
Selenium	**49.9**	0.50	mg/kg	50		99.7	80-120			
Silver	**50.8**	1.0	mg/kg	50		102	80-120			
Thallium	**50.0**	5.0	mg/kg	50		99.9	80-120			
Vanadium	**48.2**	10	mg/kg	50		96.4	80-120			
Zinc	**60.0**	3.0	mg/kg	50		120	80-120			
LCS Dup (B4D2911-BSD1)				Prepared & Analyzed: 04/29/14						
Antimony	**48.2**	10	mg/kg	50		96.4	80-120	3.63	20	
Arsenic	**50.8**	0.50	mg/kg	50		102	80-120	1.93	20	
Barium	**49.2**	10	mg/kg	50		98.4	80-120	0.0406	20	
Beryllium	**47.3**	1.0	mg/kg	50		94.7	80-120	0.445	20	
Cadmium	**49.8**	1.0	mg/kg	50		99.6	80-120	0.786	20	
Chromium	**49.6**	3.0	mg/kg	50		99.3	80-120	1.54	20	
Cobalt	**49.8**	3.0	mg/kg	50		99.5	80-120	0.413	20	
Copper	**48.3**	3.0	mg/kg	50		96.7	80-120	0.00	20	
Lead	**49.9**	3.0	mg/kg	50		99.7	80-120	0.836	20	
Molybdenum	**49.0**	5.0	mg/kg	50		98.0	80-120	1.02	20	
Nickel	**51.8**	3.0	mg/kg	50		104	80-120	3.93	20	
Selenium	**50.1**	0.50	mg/kg	50		100	80-120	0.460	20	
Silver	**50.9**	1.0	mg/kg	50		102	80-120	0.197	20	
Thallium	**48.3**	5.0	mg/kg	50		96.6	80-120	3.40	20	
Vanadium	**48.8**	10	mg/kg	50		97.7	80-120	1.29	20	
Zinc	**51.0**	3.0	mg/kg	50		102	80-120	16.3	20	
Matrix Spike (B4D2911-MS2)		**Source: 4D29002-11**		Prepared & Analyzed: 04/29/14						
Antimony	**48.3**	10	mg/kg	50	<10	96.5	75-125			
Arsenic	**52.8**	0.50	mg/kg	50	1.32	103	75-125			
Barium	**119**	10	mg/kg	50	90.0	58.6	75-125			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4D2911 - EPA 3050B										
Matrix Spike (B4D2911-MS2) Continued Source: 4D29002-11 Prepared & Analyzed: 04/29/14										
Beryllium	**47.9**	1.0	mg/kg	50	<1.0	95.8	75-125			
Cadmium	**48.6**	1.0	mg/kg	50	<1.0	97.3	75-125			
Chromium	**58.0**	3.0	mg/kg	50	11.1	93.7	75-125			
Cobalt	**54.3**	3.0	mg/kg	50	6.64	95.3	75-125			
Copper	**70.4**	3.0	mg/kg	50	23.2	94.3	75-125			
Lead	**62.8**	3.0	mg/kg	50	8.16	109	75-125			
Molybdenum	**50.6**	5.0	mg/kg	50	<5.0	101	75-125			
Nickel	**56.9**	3.0	mg/kg	50	8.66	96.5	75-125			
Selenium	**48.1**	0.50	mg/kg	50	<0.50	96.3	75-125			
Silver	**52.3**	1.0	mg/kg	50	<1.0	105	75-125			
Thallium	**39.6**	5.0	mg/kg	50	<5.0	79.2	60-140			
Vanadium	**71.6**	10	mg/kg	50	28.7	85.7	75-125			
Zinc	**100**	3.0	mg/kg	50	52.3	96.3	75-125			
Matrix Spike Dup (B4D2911-MSD2) Source: 4D29002-11 Prepared & Analyzed: 04/29/14										
Antimony	**47.8**	10	mg/kg	50	<10	95.5	75-125	1.07	40	
Arsenic	**53.2**	0.50	mg/kg	50	1.32	104	75-125	0.566	40	
Barium	**130**	10	mg/kg	50	90.0	81.1	75-125	9.01	40	
Beryllium	**47.9**	1.0	mg/kg	50	<1.0	95.7	75-125	0.0418	40	
Cadmium	**48.7**	1.0	mg/kg	50	<1.0	97.4	75-125	0.185	40	
Chromium	**59.9**	3.0	mg/kg	50	11.1	97.6	75-125	3.31	40	
Cobalt	**56.0**	3.0	mg/kg	50	6.64	98.7	75-125	3.08	40	
Copper	**81.6**	3.0	mg/kg	50	23.2	117	75-125	14.7	40	
Lead	**58.2**	3.0	mg/kg	50	8.16	100	75-125	7.52	40	
Molybdenum	**50.4**	5.0	mg/kg	50	<5.0	101	75-125	0.198	40	
Nickel	**57.8**	3.0	mg/kg	50	8.66	98.2	75-125	1.48	40	
Selenium	**48.0**	0.50	mg/kg	50	<0.50	95.9	75-125	0.364	40	
Silver	**51.9**	1.0	mg/kg	50	<1.0	104	75-125	0.768	40	
Thallium	**39.8**	5.0	mg/kg	50	<5.0	79.6	60-140	0.504	40	
Vanadium	**78.4**	10	mg/kg	50	28.7	99.3	75-125	9.07	40	
Zinc	**125**	3.0	mg/kg	50	52.3	145	75-125	21.5	40	

Total Metals CAM 17 - Quality Control

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844395
Date Received: 04/29/14
Date Reported: 05/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals CAM 17 - Quality Control										
Batch B4D2912 - EPA 7471A Prep										
Blank (B4D2912-BLK1)				Prepared & Analyzed: 04/29/14						
Mercury	<0.020	0.020	mg/kg							
LCS (B4D2912-BS1)				Prepared & Analyzed: 04/29/14						
Mercury	**0.444**	0.020	mg/kg	0.50		88.7	80-120			
LCS Dup (B4D2912-BSD1)				Prepared & Analyzed: 04/29/14						
Mercury	**0.462**	0.020	mg/kg	0.50		92.4	80-120	4.09	25	
Duplicate (B4D2912-DUP1)		**Source: 4D28007-01**		Prepared & Analyzed: 04/29/14						
Mercury	**<0.020**	0.020	mg/kg		0.0335				25	
Matrix Spike (B4D2912-MS1)		**Source: 4D28003-01**		Prepared & Analyzed: 04/29/14						
Mercury	**0.474**	0.020	mg/kg	0.50	0.0360	87.7	75-125			
Matrix Spike (B4D2912-MS2)		**Source: 4D29002-11**		Prepared & Analyzed: 04/29/14						
Mercury	**0.480**	0.020	mg/kg	0.50	0.00550	94.9	75-125			
Matrix Spike Dup (B4D2912-MSD1)		**Source: 4D28003-01**		Prepared & Analyzed: 04/29/14						
Mercury	**0.480**	0.020	mg/kg	0.50	0.0360	88.7	75-125	1.05	25	
Matrix Spike Dup (B4D2912-MSD2)		**Source: 4D29002-11**		Prepared & Analyzed: 04/29/14						
Mercury	**0.472**	0.020	mg/kg	0.50	0.00550	93.4	75-125	1.57	25	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844395
Project No:	0106270030	**Date Received:**	04/29/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	05/01/14

Special Notes

Viorel Vasile
Operations Manager

CHAIN-OF-CUSTODY RECORD A844395 / AD29002 119705 NB 31323

PROJECT NAME: Pechiney

PROJECT NUMBER: 0106270030

RESULTS TO: Linda Conlan

TURNAROUND TIME: 48 HR

SAMPLE SHIPMENT METHOD: lab courier

LABORATORY NAME: American Analytics

LABORATORY ADDRESS:

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: AMEC

DATE: 4-29-14 PAGE 1 OF 1

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): Kimberly Chominsky

ANALYSES

DATE	TIME	SAMPLE NUMBER	EPA 8015 CC	EPA 8082	Title 22 Metals	EPA 8260	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
4-29-14	0656	#1005	X	X	X	X	4 oz glass jar	S			X		1	AD29002-01
	0658	#1006	X	X	X	X		S			X		1	-02
	0700	#1007	X	X	X	X		S			X		1	-03
	0702	#1008	X	X	X	X		S			X		1	-04
	0703	#1009	X	X	X	X		S			X		1	-05
	0705	#1010	X	X	X	X		S			X		1	-06
	0707	#1011	X	X	X	X		S			X		1	-07
	0709	#1012	X	X	X	X		S			X		1	-08
	0710	#1013	X	X	X	X		S			X		1	-09
	0711	#1014	X	X	X	X		S			X		1	-10
	0713	#1015	X	X	X	X		S			X		1	-11

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: Kimberly Chominsky PRINTED NAME: Kimberly Chominsky COMPANY: AMEC	4/29/14	0850	SIGNATURE: PRINTED NAME: Sitong Huang COMPANY: AMEC	4/29/14	0850
SIGNATURE: PRINTED NAME: Sitong Huang COMPANY: AMEC	4/29/14	0945	SIGNATURE: PRINTED NAME: Gustavo Lopez COMPANY: American A.	4/29/14	0945
SIGNATURE: PRINTED NAME: Gustavo Lopez COMPANY: AA	4/30/14	1141	SIGNATURE: PRINTED NAME: Victor Vargas COMPANY: AA	4/30/14	1141

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS:

PRIORITY

Rush 48 Hrs

Date 4/29/14 Time 1215 Sign

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

9765 Eton Avenue
Chatsworth
California 91311
Tel: (818) 998-5547
Fax: (818) 998-7258

July 01, 2014

Linda Conlan

AMEC Environment & Infrastructure, Inc.

121 Innovation Drive, Suite 200

Irvine, CA 92617

Re : Former Pechiney Cast Plate, Inc. / 0106270030

A844416 / 4F26005

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 06/26/14 15:20 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844416
Date Received: 06/26/14
Date Reported: 07/01/14

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8082 PCBs					
920-IIIA-CS-CS-001	4F26005-01	Concrete	2	06/26/14 10:08	06/26/14 15:20
920-IIIA-CS-CS-002	4F26005-02	Concrete	2	06/26/14 10:15	06/26/14 15:20
921-IIIA-CS-CS-001	4F26005-03	Concrete	2	06/26/14 09:20	06/26/14 15:20
921-IIIA-CS-CS-002	4F26005-04	Concrete	2	06/26/14 09:28	06/26/14 15:20
922-IIIA-CS-CS-001	4F26005-05	Concrete	2	06/26/14 09:33	06/26/14 15:20
923-IIIA-CS-CS-001	4F26005-06	Concrete	2	06/26/14 09:40	06/26/14 15:20
923-IIIA-CS-CS-003	4F26005-07	Concrete	2	06/26/14 10:30	06/26/14 15:20
923-IIIA-CS-CS-002	4F26005-08	Concrete	2	06/26/14 10:25	06/26/14 15:20
DC-431	4F26005-09	Concrete	2	06/26/14 09:47	06/26/14 15:20
DC-432	4F26005-10	Concrete	2	06/26/14 09:55	06/26/14 15:20
DC-433	4F26005-11	Concrete	2	06/26/14 10:36	06/26/14 15:20

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844416
Date Received: 06/26/14
Date Reported: 07/01/14
Units: ug/kg

Date Sampled:	06/26/14	06/26/14	06/26/14	06/26/14	
Date Prepared:	06/27/14	06/27/14	06/27/14	06/27/14	
Date Analyzed:	06/27/14	06/27/14	06/27/14	06/27/14	
AA ID No:	4F26005-01	4F26005-02	4F26005-03	4F26005-04	
Client ID No:	920-IIIA-CS-CS-001	920-IIIA-CS-CS-002	921-IIIA-CS-CS-001	921-IIIA-CS-CS-002	
Matrix:	Concrete	Concrete	Concrete	Concrete	
Dilution Factor:	1	1	1	1	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<20	<20	<20	<20	20
Aroclor-1221	<20	<20	<20	<20	20
Aroclor-1232	<20	<20	<20	<20	20
Aroclor-1242	<20	<20	<20	<20	20
Aroclor-1248	<20	**68**	**49**	**51**	20
Aroclor-1254	**30**	**150**	**130**	**72**	20
Aroclor-1260	**21**	**24**	**37**	**24**	20
Aroclor-1268	<20	<20	<20	<20	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	86%	85%	85%	87%	50-150
Tetrachloro-meta-xylene	67%	69%	69%	68%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844416
Date Received: 06/26/14
Date Reported: 07/01/14
Units: ug/kg

Date Sampled:	06/26/14	06/26/14	06/26/14	06/26/14	
Date Prepared:	06/27/14	06/27/14	06/27/14	06/27/14	
Date Analyzed:	06/27/14	06/27/14	06/27/14	06/27/14	
AA ID No:	4F26005-05	4F26005-06	4F26005-07	4F26005-08	
Client ID No:	922-IIIA-CS-CS-0 01	923-IIIA-CS-CS-0 01	923-IIIA-CS-CS-0 03	923-IIIA-CS-CS-0 02	
Matrix:	Concrete	Concrete	Concrete	Concrete	
Dilution Factor:	1	1	1	1	MRL
8082 PCBs (EPA 8082)					
Aroclor-1016	<20	<20	<20	<20	20
Aroclor-1221	<20	<20	<20	<20	20
Aroclor-1232	<20	<20	<20	<20	20
Aroclor-1242	<20	<20	<20	<20	20
Aroclor-1248	<20	**1600**	**92**	<20	20
Aroclor-1254	<20	**2500**	**250**	**32**	20
Aroclor-1260	<20	**1100**	**56**	<20	20
Aroclor-1268	<20	<20	<20	<20	20
Surrogates					**%REC Limits**
Decachlorobiphenyl	88%	0.0 [1]	91%	81%	50-150
Tetrachloro-meta-xylene	66%	61%	74%	66%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.
Method: Polychlorinated Biphenyls by GC

AA Project No: A844416
Date Received: 06/26/14
Date Reported: 07/01/14
Units: ug/kg

Date Sampled:	06/26/14	06/26/14	06/26/14	
Date Prepared:	06/27/14	06/27/14	06/27/14	
Date Analyzed:	06/27/14	06/27/14	06/27/14	
AA ID No:	4F26005-09	4F26005-10	4F26005-11	
Client ID No:	DC-431	DC-432	DC-433	
Matrix:	Concrete	Concrete	Concrete	
Dilution Factor:	1	1	1	MRL
8082 PCBs (EPA 8082)				
Aroclor-1016	<20	<20	<20	20
Aroclor-1221	<20	<20	<20	20
Aroclor-1232	<20	<20	<20	20
Aroclor-1242	<20	<20	<20	20
Aroclor-1248	<20	**6200**	**64**	20
Aroclor-1254	**570**	**36000**	**120**	20
Aroclor-1260	<20	**3100**	**86**	20
Aroclor-1268	<20	<20	<20	20
Surrogates				**%REC Limits**
Decachlorobiphenyl	75%	0.0 [1]	93%	50-150
Tetrachloro-meta-xylene	59%	79%	66%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844416
Date Received: 06/26/14
Date Reported: 07/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B4F2701 - EPA 3540C										
Blank (B4F2701-BLK1)				Prepared & Analyzed: 06/27/14						
Aroclor-1016	<10	10	ug/kg							
Aroclor-1221	<10	10	ug/kg							
Aroclor-1232	<10	10	ug/kg							
Aroclor-1242	<10	10	ug/kg							
Aroclor-1248	<10	10	ug/kg							
Aroclor-1254	<10	10	ug/kg							
Aroclor-1260	<10	10	ug/kg							
Aroclor-1268	<10	10	ug/kg							
Surrogate: Decachlorobiphenyl	*2.41*		*ug/kg*	*2.5*		*96.5*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*2.32*		*ug/kg*	*2.5*		*92.7*	*50-150*			
LCS (B4F2701-BS1)				Prepared & Analyzed: 06/27/14						
Aroclor-1016	**28.8**	10	ug/kg	25		115	60-140		40	
Aroclor-1260	**24.6**	10	ug/kg	25		98.2	60-140		40	
Surrogate: Decachlorobiphenyl	*2.34*		*ug/kg*	*2.5*		*93.7*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*1.69*		*ug/kg*	*2.5*		*67.5*	*50-150*			
LCS Dup (B4F2701-BSD1)				Prepared & Analyzed: 06/27/14						
Aroclor-1016	**28.2**	10	ug/kg	25		113	60-140	2.11	40	
Aroclor-1260	**24.4**	10	ug/kg	25		97.6	60-140	0.613	40	
Surrogate: Decachlorobiphenyl	*2.27*		*ug/kg*	*2.5*		*90.8*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*1.43*		*ug/kg*	*2.5*		*57.4*	*50-150*			
Duplicate (B4F2701-DUP1)		**Source: 4F26005-02**		Prepared & Analyzed: 06/27/14						
Aroclor-1016	**<20**	20	ug/kg		<20				40	
Aroclor-1221	**<20**	20	ug/kg		<20				40	
Aroclor-1232	**<20**	20	ug/kg		<20				40	
Aroclor-1242	**<20**	20	ug/kg		<20				40	
Aroclor-1248	**67.4**	20	ug/kg		67.8			0.592	40	
Aroclor-1254	**141**	20	ug/kg		146			3.83	40	
Aroclor-1260	**23.7**	20	ug/kg		24.5			3.32	40	
Aroclor-1268	**<20**	20	ug/kg		<20				40	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: AMEC Environment & Infrastructure, Inc.
Project No: 0106270030
Project Name: Former Pechiney Cast Plate, Inc.

AA Project No: A844416
Date Received: 06/26/14
Date Reported: 07/01/14

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls by GC - Quality Control										
Batch B4F2701 - EPA 3540C										
Duplicate (B4F2701-DUP1) Continued				**Source: 4F26005-02**	Prepared & Analyzed: 06/27/14					
Surrogate: Decachlorobiphenyl	*4.15*		*ug/kg*	*5.0*		*83.1*	*50-150*			
Surrogate: Tetrachloro-meta-xylene	*2.98*		*ug/kg*	*5.0*		*59.6*	*50-150*			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	AMEC Environment & Infrastructure, Inc.	**AA Project No:**	A844416
Project No:	0106270030	**Date Received:**	06/26/14
Project Name:	Former Pechiney Cast Plate, Inc.	**Date Reported:**	07/01/14

Special Notes

[1] = **S-01** : The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

Viorel Vasile
Operations Manager

CHAIN-OF-CUSTODY RECORD A8449416/AF26005 120195 **NB** 31229

PROJECT NAME: Former Pechiney Cast Plate Facility			DATE: 6/26/14 PAGE 1 OF 1
PROJECT NUMBER: 0106270030	LABORATORY NAME: American Analytics	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: L. Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: 48HR			
SAMPLE SHIPMENT METHOD: Lab Courier	LABORATORY CONTACT: Vinnie Vasile		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	EPA PCBs (8082)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
6/26/14	1008	920-IIIA-CS-CS-001	✓	4oz glass jar	O			X		1	concrete
	1015	920-IIIA-CS-CS-002	X		O			X		1	
	0920	921-IIIA-CS-CS-001	X		O			X		1	
	0928	921-IIIA-CS-CS-002	X		O			X		1	
	0933	922-IIIA-CS-CS-001	X		O			X		1	
	0940	923-IIIA-CS-CS-001	X		O			X		1	
	1030	923-IIIA-CS-CS-003	X		O			X		1	
	1025	923-IIIA-CS-CS-002	X		O			X		1	
	0947	DC-431	X		O			X		1	
	0955	DC-432	X		O			X		1	
	1036	DC-433	X		O			X		1	

AF26005-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	6/26/14	1318	SIGNATURE:	6/26/14	1318
PRINTED NAME: Stephen Tharey			PRINTED NAME: Allen Aminion		
COMPANY: AMEC			COMPANY: American Analytics		
SIGNATURE:	6/26/14	1520	SIGNATURE:	6/26/14	1520
PRINTED NAME: Allen Aminion			PRINTED NAME: VINNIE VASILE		
COMPANY: American Analytics			COMPANY: AA		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 11

SAMPLING COMMENTS:

PRIORITY
Rush 48 Hrs SH
Date 6/26/14 Time 1645 Sign

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

APPENDIX B

Laboratory Reports and Chain-of-Custody Documentation – Import Fill

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WORK ORDER NUMBER: 14-08-1820

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: 106270030

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 08/27/2014 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 14-08-1820

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Work Order Narrative

Work Order: 14-08-1820 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 08/25/14. They were assigned to Work Order 14-08-1820.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	14-08-1820
		Project Name:	106270030
		PO Number:	
		Date/Time Received:	08/25/14 10:25
		Number of Containers:	20
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
2-1	14-08-1820-1	08/25/14 07:05	5	Solid
2-2	14-08-1820-2	08/25/14 07:25	5	Solid
2-3	14-08-1820-3	08/25/14 07:35	5	Solid
2-4	14-08-1820-4	08/25/14 07:50	5	Solid

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-08-1820
	121 Innovation Drive, Suite 200	Project Name:	106270030
	Irvine, CA 92617-3094	Received:	08/25/14
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
2-1 (14-08-1820-1)						
Barium	92.5		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.339		0.245	mg/kg	EPA 6010B	EPA 3050B
Chromium	11.6		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	8.29		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	12.0		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	9.56		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.35		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	24.8		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	35.9		0.980	mg/kg	EPA 6010B	EPA 3050B
Mercury	0.0838		0.0806	mg/kg	EPA 7471A	EPA 7471A Total
2-2 (14-08-1820-2)						
Barium	142		0.490	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.465		0.245	mg/kg	EPA 6010B	EPA 3050B
Cadmium	0.526		0.490	mg/kg	EPA 6010B	EPA 3050B
Chromium	15.0		0.245	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.1		0.245	mg/kg	EPA 6010B	EPA 3050B
Copper	15.2		0.490	mg/kg	EPA 6010B	EPA 3050B
Lead	4.28		0.490	mg/kg	EPA 6010B	EPA 3050B
Nickel	17.0		0.245	mg/kg	EPA 6010B	EPA 3050B
Vanadium	27.2		0.245	mg/kg	EPA 6010B	EPA 3050B
Zinc	41.1		0.980	mg/kg	EPA 6010B	EPA 3050B
2-3 (14-08-1820-3)						
Arsenic	0.868		0.739	mg/kg	EPA 6010B	EPA 3050B
Barium	76.1		0.493	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.418		0.246	mg/kg	EPA 6010B	EPA 3050B
Chromium	9.30		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.01		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	7.57		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	5.78		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	6.79		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	22.9		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	30.5		0.985	mg/kg	EPA 6010B	EPA 3050B
C6-C44 Total	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Return to Contents

* MDL is shown

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Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	14-08-1820
	121 Innovation Drive, Suite 200	Project Name:	106270030
	Irvine, CA 92617-3094	Received:	08/25/14
Attn:	Linda Conlan		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
2-4 (14-08-1820-4)						
Barium	58.2		0.493	mg/kg	EPA 6010B	EPA 3050B
Chromium	3.84		0.246	mg/kg	EPA 6010B	EPA 3050B
Cobalt	3.57		0.246	mg/kg	EPA 6010B	EPA 3050B
Copper	5.13		0.493	mg/kg	EPA 6010B	EPA 3050B
Lead	0.971		0.493	mg/kg	EPA 6010B	EPA 3050B
Nickel	3.83		0.246	mg/kg	EPA 6010B	EPA 3050B
Vanadium	13.0		0.246	mg/kg	EPA 6010B	EPA 3050B
Zinc	20.1		0.985	mg/kg	EPA 6010B	EPA 3050B

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-1	**14-08-1820-1-B**	**08/25/14 07:05**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 19:41**	**140825B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	73	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-2	**14-08-1820-2-B**	**08/25/14 07:25**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 19:57**	**140825B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	75	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-3	**14-08-1820-3-B**	**08/25/14 07:35**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 20:13**	**140825B01A**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	15	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	76	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-4	**14-08-1820-4-B**	**08/25/14 07:50**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 20:29**	**140825B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	78	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-1105**	**N/A**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 08:50**	**140825B01A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: 106270030			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-1	**14-08-1820-1-A**	**08/25/14 07:05**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:24**	**140825L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	ND	0.735	0.980	
Barium	92.5	0.490	0.980	
Beryllium	0.339	0.245	0.980	
Cadmium	ND	0.490	0.980	
Chromium	11.6	0.245	0.980	
Cobalt	8.29	0.245	0.980	
Copper	12.0	0.490	0.980	
Lead	9.56	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	8.35	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	24.8	0.245	0.980	
Zinc	35.9	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: 106270030			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-2	**14-08-1820-2-A**	**08/25/14 07:25**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:25**	**140825L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.735	0.980	
Arsenic	ND	0.735	0.980	
Barium	142	0.490	0.980	
Beryllium	0.465	0.245	0.980	
Cadmium	0.526	0.490	0.980	
Chromium	15.0	0.245	0.980	
Cobalt	11.1	0.245	0.980	
Copper	15.2	0.490	0.980	
Lead	4.28	0.490	0.980	
Molybdenum	ND	0.245	0.980	
Nickel	17.0	0.245	0.980	
Selenium	ND	0.735	0.980	
Silver	ND	0.245	0.980	
Thallium	ND	0.735	0.980	
Vanadium	27.2	0.245	0.980	
Zinc	41.1	0.980	0.980	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: 106270030			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-3	**14-08-1820-3-A**	**08/25/14 07:35**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:27**	**140825L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	0.868	0.739	0.985	
Barium	76.1	0.493	0.985	
Beryllium	0.418	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	9.30	0.246	0.985	
Cobalt	6.01	0.246	0.985	
Copper	7.57	0.493	0.985	
Lead	5.78	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	6.79	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	22.9	0.246	0.985	
Zinc	30.5	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: 106270030			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-4	**14-08-1820-4-A**	**08/25/14 07:50**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:28**	**140825L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.739	0.985	
Arsenic	ND	0.739	0.985	
Barium	58.2	0.493	0.985	
Beryllium	ND	0.246	0.985	
Cadmium	ND	0.493	0.985	
Chromium	3.84	0.246	0.985	
Cobalt	3.57	0.246	0.985	
Copper	5.13	0.493	0.985	
Lead	0.971	0.493	0.985	
Molybdenum	ND	0.246	0.985	
Nickel	3.83	0.246	0.985	
Selenium	ND	0.739	0.985	
Silver	ND	0.246	0.985	
Thallium	ND	0.739	0.985	
Vanadium	13.0	0.246	0.985	
Zinc	20.1	0.985	0.985	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: 106270030			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-18825**	**N/A**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:20**	**140825L01**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1.00	
Arsenic	ND	0.750	1.00	
Barium	ND	0.500	1.00	
Beryllium	ND	0.250	1.00	
Cadmium	ND	0.500	1.00	
Chromium	ND	0.250	1.00	
Cobalt	ND	0.250	1.00	
Copper	ND	0.500	1.00	
Lead	ND	0.500	1.00	
Molybdenum	ND	0.250	1.00	
Nickel	ND	0.250	1.00	
Selenium	ND	0.750	1.00	
Silver	ND	0.250	1.00	
Thallium	ND	0.750	1.00	
Vanadium	ND	0.250	1.00	
Zinc	ND	1.00	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: 106270030			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-1	**14-08-1820-1-A**	**08/25/14 07:05**	**Solid**	**Mercury 04**	**08/25/14**	**08/25/14 18:43**	**140825L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	0.0838	0.0806	1.00	

2-2	**14-08-1820-2-A**	**08/25/14 07:25**	**Solid**	**Mercury 04**	**08/25/14**	**08/25/14 18:46**	**140825L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0862	1.00	

2-3	**14-08-1820-3-A**	**08/25/14 07:35**	**Solid**	**Mercury 04**	**08/25/14**	**08/25/14 18:52**	**140825L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

2-4	**14-08-1820-4-A**	**08/25/14 07:50**	**Solid**	**Mercury 04**	**08/25/14**	**08/25/14 18:54**	**140825L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0806	1.00	

Method Blank	**099-16-272-514**	**N/A**	**Solid**	**Mercury 04**	**08/25/14**	**08/25/14 18:25**	**140825L02**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0833	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: 106270030			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-1	**14-08-1820-1-B**	**08/25/14 07:05**	**Solid**	**GC 31**	**08/25/14**	**08/26/14 19:25**	**140825L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	60-125	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

2-2	**14-08-1820-2-B**	**08/25/14 07:25**	**Solid**	**GC 31**	**08/25/14**	**08/26/14 19:44**	**140825L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	111	60-125	
2,4,5,6-Tetrachloro-m-Xylene	116	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: 106270030			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-3	**14-08-1820-3-B**	**08/25/14 07:35**	**Solid**	**GC 31**	**08/25/14**	**08/26/14 20:04**	**140825L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	109	50-130	

2-4	**14-08-1820-4-B**	**08/25/14 07:50**	**Solid**	**GC 31**	**08/25/14**	**08/26/14 20:23**	**140825L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	60-125	
2,4,5,6-Tetrachloro-m-Xylene	108	50-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
		Units:	ug/kg
Project: 106270030			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-02-003-304**	**N/A**	**Solid**	**GC 31**	**08/25/14**	**08/26/14 19:06**	**140825L11**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1.00	
Aroclor-1221	ND	50	1.00	
Aroclor-1232	ND	50	1.00	
Aroclor-1242	ND	50	1.00	
Aroclor-1248	ND	50	1.00	
Aroclor-1254	ND	50	1.00	
Aroclor-1260	ND	50	1.00	
Aroclor-1262	ND	50	1.00	
Aroclor-1268	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	60-125	
2,4,5,6-Tetrachloro-m-Xylene	114	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-1	**14-08-1820-1-D**	**08/25/14 07:05**	**Solid**	**GC/MS FFF**	**08/25/14**	**08/25/14 13:16**	**140825L001**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	48	1.00	
Benzene	ND	0.96	1.00	
Bromobenzene	ND	0.96	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.96	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.96	1.00	
sec-Butylbenzene	ND	0.96	1.00	
tert-Butylbenzene	ND	0.96	1.00	
Carbon Disulfide	ND	9.6	1.00	
Carbon Tetrachloride	ND	0.96	1.00	
Chlorobenzene	ND	0.96	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.96	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.96	1.00	
4-Chlorotoluene	ND	0.96	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.8	1.00	
1,2-Dibromoethane	ND	0.96	1.00	
Dibromomethane	ND	0.96	1.00	
1,2-Dichlorobenzene	ND	0.96	1.00	
1,3-Dichlorobenzene	ND	0.96	1.00	
1,4-Dichlorobenzene	ND	0.96	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.96	1.00	
1,2-Dichloroethane	ND	0.96	1.00	
1,1-Dichloroethene	ND	0.96	1.00	
c-1,2-Dichloroethene	ND	0.96	1.00	
t-1,2-Dichloroethene	ND	0.96	1.00	
1,2-Dichloropropane	ND	0.96	1.00	
1,3-Dichloropropane	ND	0.96	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 2 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.96	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	ND	0.96	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.96	1.00	
p-Isopropyltoluene	ND	0.96	1.00	
Methylene Chloride	ND	9.6	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.6	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.96	1.00	
1,1,1,2-Tetrachloroethane	ND	0.96	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.96	1.00	
Toluene	ND	0.96	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.96	1.00	
1,1,2-Trichloroethane	ND	0.96	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.6	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.6	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.6	1.00	
Vinyl Chloride	ND	0.96	1.00	
p/m-Xylene	ND	1.9	1.00	
o-Xylene	ND	0.96	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	80-120	
Dibromofluoromethane	116	79-133	
1,2-Dichloroethane-d4	123	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-2	**14-08-1820-2-D**	**08/25/14 07:25**	**Solid**	**GC/MS FFF**	**08/25/14**	**08/25/14 13:43**	**140825L001**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	46	1.00	
Benzene	ND	0.91	1.00	
Bromobenzene	ND	0.91	1.00	
Bromochloromethane	ND	1.8	1.00	
Bromodichloromethane	ND	0.91	1.00	
Bromoform	ND	4.6	1.00	
Bromomethane	ND	18	1.00	
2-Butanone	ND	18	1.00	
n-Butylbenzene	ND	0.91	1.00	
sec-Butylbenzene	ND	0.91	1.00	
tert-Butylbenzene	ND	0.91	1.00	
Carbon Disulfide	ND	9.1	1.00	
Carbon Tetrachloride	ND	0.91	1.00	
Chlorobenzene	ND	0.91	1.00	
Chloroethane	ND	1.8	1.00	
Chloroform	ND	0.91	1.00	
Chloromethane	ND	18	1.00	
2-Chlorotoluene	ND	0.91	1.00	
4-Chlorotoluene	ND	0.91	1.00	
Dibromochloromethane	ND	1.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.6	1.00	
1,2-Dibromoethane	ND	0.91	1.00	
Dibromomethane	ND	0.91	1.00	
1,2-Dichlorobenzene	ND	0.91	1.00	
1,3-Dichlorobenzene	ND	0.91	1.00	
1,4-Dichlorobenzene	ND	0.91	1.00	
Dichlorodifluoromethane	ND	1.8	1.00	
1,1-Dichloroethane	ND	0.91	1.00	
1,2-Dichloroethane	ND	0.91	1.00	
1,1-Dichloroethene	ND	0.91	1.00	
c-1,2-Dichloroethene	ND	0.91	1.00	
t-1,2-Dichloroethene	ND	0.91	1.00	
1,2-Dichloropropane	ND	0.91	1.00	
1,3-Dichloropropane	ND	0.91	1.00	
2,2-Dichloropropane	ND	4.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 4 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.8	1.00	
c-1,3-Dichloropropene	ND	0.91	1.00	
t-1,3-Dichloropropene	ND	1.8	1.00	
Ethylbenzene	ND	0.91	1.00	
2-Hexanone	ND	18	1.00	
Isopropylbenzene	ND	0.91	1.00	
p-Isopropyltoluene	ND	0.91	1.00	
Methylene Chloride	ND	9.1	1.00	
4-Methyl-2-Pentanone	ND	18	1.00	
Naphthalene	ND	9.1	1.00	
n-Propylbenzene	ND	1.8	1.00	
Styrene	ND	0.91	1.00	
1,1,1,2-Tetrachloroethane	ND	0.91	1.00	
1,1,2,2-Tetrachloroethane	ND	1.8	1.00	
Tetrachloroethene	ND	0.91	1.00	
Toluene	ND	0.91	1.00	
1,2,3-Trichlorobenzene	ND	1.8	1.00	
1,2,4-Trichlorobenzene	ND	1.8	1.00	
1,1,1-Trichloroethane	ND	0.91	1.00	
1,1,2-Trichloroethane	ND	0.91	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.1	1.00	
Trichloroethene	ND	1.8	1.00	
Trichlorofluoromethane	ND	9.1	1.00	
1,2,3-Trichloropropane	ND	1.8	1.00	
1,2,4-Trimethylbenzene	ND	1.8	1.00	
1,3,5-Trimethylbenzene	ND	1.8	1.00	
Vinyl Acetate	ND	9.1	1.00	
Vinyl Chloride	ND	0.91	1.00	
p/m-Xylene	ND	1.8	1.00	
o-Xylene	ND	0.91	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	119	79-133	
1,2-Dichloroethane-d4	129	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-3	**14-08-1820-3-D**	**08/25/14 07:35**	**Solid**	**GC/MS FFF**	**08/25/14**	**08/25/14 14:10**	**140825L001**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	1.0	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	1.0	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 6 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	1.0	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	80-120	
Dibromofluoromethane	115	79-133	
1,2-Dichloroethane-d4	128	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
2-4	**14-08-1820-4-D**	**08/25/14 07:50**	**Solid**	**GC/MS FFF**	**08/25/14**	**08/25/14 14:37**	**140825L001**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	56	1.00	
Benzene	ND	1.1	1.00	
Bromobenzene	ND	1.1	1.00	
Bromochloromethane	ND	2.2	1.00	
Bromodichloromethane	ND	1.1	1.00	
Bromoform	ND	5.6	1.00	
Bromomethane	ND	22	1.00	
2-Butanone	ND	22	1.00	
n-Butylbenzene	ND	1.1	1.00	
sec-Butylbenzene	ND	1.1	1.00	
tert-Butylbenzene	ND	1.1	1.00	
Carbon Disulfide	ND	11	1.00	
Carbon Tetrachloride	ND	1.1	1.00	
Chlorobenzene	ND	1.1	1.00	
Chloroethane	ND	2.2	1.00	
Chloroform	ND	1.1	1.00	
Chloromethane	ND	22	1.00	
2-Chlorotoluene	ND	1.1	1.00	
4-Chlorotoluene	ND	1.1	1.00	
Dibromochloromethane	ND	2.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.6	1.00	
1,2-Dibromoethane	ND	1.1	1.00	
Dibromomethane	ND	1.1	1.00	
1,2-Dichlorobenzene	ND	1.1	1.00	
1,3-Dichlorobenzene	ND	1.1	1.00	
1,4-Dichlorobenzene	ND	1.1	1.00	
Dichlorodifluoromethane	ND	2.2	1.00	
1,1-Dichloroethane	ND	1.1	1.00	
1,2-Dichloroethane	ND	1.1	1.00	
1,1-Dichloroethene	ND	1.1	1.00	
c-1,2-Dichloroethene	ND	1.1	1.00	
t-1,2-Dichloroethene	ND	1.1	1.00	
1,2-Dichloropropane	ND	1.1	1.00	
1,3-Dichloropropane	ND	1.1	1.00	
2,2-Dichloropropane	ND	5.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 8 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.2	1.00	
c-1,3-Dichloropropene	ND	1.1	1.00	
t-1,3-Dichloropropene	ND	2.2	1.00	
Ethylbenzene	ND	1.1	1.00	
2-Hexanone	ND	22	1.00	
Isopropylbenzene	ND	1.1	1.00	
p-Isopropyltoluene	ND	1.1	1.00	
Methylene Chloride	ND	11	1.00	
4-Methyl-2-Pentanone	ND	22	1.00	
Naphthalene	ND	11	1.00	
n-Propylbenzene	ND	2.2	1.00	
Styrene	ND	1.1	1.00	
1,1,1,2-Tetrachloroethane	ND	1.1	1.00	
1,1,2,2-Tetrachloroethane	ND	2.2	1.00	
Tetrachloroethene	ND	1.1	1.00	
Toluene	ND	1.1	1.00	
1,2,3-Trichlorobenzene	ND	2.2	1.00	
1,2,4-Trichlorobenzene	ND	2.2	1.00	
1,1,1-Trichloroethane	ND	1.1	1.00	
1,1,2-Trichloroethane	ND	1.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
Trichloroethene	ND	2.2	1.00	
Trichlorofluoromethane	ND	11	1.00	
1,2,3-Trichloropropane	ND	2.2	1.00	
1,2,4-Trimethylbenzene	ND	2.2	1.00	
1,3,5-Trimethylbenzene	ND	2.2	1.00	
Vinyl Acetate	ND	11	1.00	
Vinyl Chloride	ND	1.1	1.00	
p/m-Xylene	ND	2.2	1.00	
o-Xylene	ND	1.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	80-120	
Dibromofluoromethane	119	79-133	
1,2-Dichloroethane-d4	127	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-025-25499**	**N/A**	**Solid**	**GC/MS FFF**	**08/25/14**	**08/25/14 12:23**	**140825L001**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	1.0	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	1.0	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: 106270030			Page 10 of 10

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	1.0	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	80-120	
Dibromofluoromethane	110	79-133	
1,2-Dichloroethane-d4	114	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: 106270030			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-08-1793-9	**Sample**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 12:05**	**140825S01**
14-08-1793-9	**Matrix Spike**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 09:22**	**140825S01**
14-08-1793-9	**Matrix Spike Duplicate**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 09:39**	**140825S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	1046	400.0	1021	0	1105	15	64-130	8	0-15	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: 106270030			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-08-1627-1	**Sample**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:29**	**140825S01**
14-08-1627-1	**Matrix Spike**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:30**	**140825S01**
14-08-1627-1	**Matrix Spike Duplicate**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:31**	**140825S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	5.365	21	3.853	15	50-115	33	0-20	3,4
Arsenic	11.86	25.00	35.95	96	34.57	91	75-125	4	0-20	
Barium	137.8	25.00	168.6	4X	169.7	4X	75-125	4X	0-20	Q
Beryllium	0.4801	25.00	24.77	97	24.58	96	75-125	1	0-20	
Cadmium	1.554	25.00	25.30	95	25.56	96	75-125	1	0-20	
Chromium	31.49	25.00	59.41	112	58.50	108	75-125	2	0-20	
Cobalt	11.91	25.00	37.85	104	36.91	100	75-125	3	0-20	
Copper	23.88	25.00	52.45	114	51.76	112	75-125	1	0-20	
Lead	10.06	25.00	32.82	91	34.73	99	75-125	6	0-20	
Molybdenum	1.299	25.00	20.73	78	19.54	73	75-125	6	0-20	3
Nickel	26.02	25.00	52.68	107	50.61	98	75-125	4	0-20	
Selenium	ND	25.00	23.21	93	21.91	88	75-125	6	0-20	
Silver	ND	12.50	12.43	99	12.39	99	75-125	0	0-20	
Thallium	ND	25.00	19.91	80	20.43	82	75-125	3	0-20	
Vanadium	52.39	25.00	84.18	127	80.69	113	75-125	4	0-20	3
Zinc	70.29	25.00	101.4	124	103.0	131	75-125	2	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: 106270030			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-08-1673-1	**Sample**	**Solid**	**Mercury 04**	**08/25/14**	**08/25/14 18:37**	**140825S02**
14-08-1673-1	**Matrix Spike**	**Solid**	**Mercury 05**	**08/23/14**	**08/26/14 12:30**	**140825S02**
14-08-1673-1	**Matrix Spike Duplicate**	**Solid**	**Mercury 04**	**08/25/14**	**08/25/14 18:34**	**140825S02**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.1606	0.8350	0.8029	77	0.7870	75	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: 106270030			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
2-4	**Sample**	**Solid**	**GC 31**	**08/25/14**	**08/26/14 20:23**	**140825S11**
2-4	**Matrix Spike**	**Solid**	**GC 31**	**08/25/14**	**08/26/14 20:42**	**140825S11**
2-4	**Matrix Spike Duplicate**	**Solid**	**GC 31**	**08/25/14**	**08/27/14 10:24**	**140825S11**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	93.74	94	90.63	91	50-135	3	0-25	
Aroclor-1260	ND	100.0	93.02	93	96.18	96	50-135	3	0-25	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: 106270030			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-1105	**LCS**	**Solid**	**GC 48**	**08/25/14**	**08/25/14 09:06**	**140825B01A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	371.6	93	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: 106270030			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-002-18825	**LCS**	**Solid**	**ICP 7300**	**08/25/14**	**08/25/14 23:22**	**140825L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	23.65	95	80-120	73-127	
Arsenic	25.00	24.41	98	80-120	73-127	
Barium	25.00	23.82	95	80-120	73-127	
Beryllium	25.00	23.29	93	80-120	73-127	
Cadmium	25.00	24.66	99	80-120	73-127	
Chromium	25.00	23.99	96	80-120	73-127	
Cobalt	25.00	26.42	106	80-120	73-127	
Copper	25.00	24.87	99	80-120	73-127	
Lead	25.00	24.83	99	80-120	73-127	
Molybdenum	25.00	24.43	98	80-120	73-127	
Nickel	25.00	24.85	99	80-120	73-127	
Selenium	25.00	22.28	89	80-120	73-127	
Silver	12.50	11.69	94	80-120	73-127	
Thallium	25.00	25.29	101	80-120	73-127	
Vanadium	25.00	23.44	94	80-120	73-127	
Zinc	25.00	25.64	103	80-120	73-127	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: 106270030			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-272-514	**LCS**	**Solid**	**Mercury 04**	**08/25/14**	**08/25/14 18:28**	**140825L02**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.7379	88	85-121	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 3540C
		Method:	EPA 8082
Project: 106270030			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-02-003-304	**LCS**	**Solid**	**GC 31**	**08/25/14**	**08/26/14 18:47**	**140825L11**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	91.86	92	50-135	
Aroclor-1260	100.0	90.91	91	60-130	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	08/25/14
121 Innovation Drive, Suite 200		Work Order:	14-08-1820
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
Project: 106270030			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-025-25499	**LCS**	**Solid**	**GC/MS FFF**	**08/25/14**	**08/25/14 10:24**	**140825L001**
095-01-025-25499	**LCSD**	**Solid**	**GC/MS FFF**	**08/25/14**	**08/25/14 10:51**	**140825L001**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	43.64	87	45.52	91	80-120	73-127	4	0-20	
Carbon Tetrachloride	50.00	45.35	91	47.68	95	65-137	53-149	5	0-20	
Chlorobenzene	50.00	45.99	92	49.50	99	80-120	73-127	7	0-20	
1,2-Dibromoethane	50.00	43.58	87	49.93	100	80-120	73-127	14	0-20	
1,2-Dichlorobenzene	50.00	46.16	92	50.69	101	80-120	73-127	9	0-20	
1,2-Dichloroethane	50.00	43.73	87	47.65	95	80-120	73-127	9	0-20	
1,1-Dichloroethene	50.00	46.38	93	48.02	96	68-128	58-138	3	0-20	
Ethylbenzene	50.00	44.69	89	47.33	95	80-120	73-127	6	0-20	
Toluene	50.00	44.64	89	46.81	94	80-120	73-127	5	0-20	
Trichloroethene	50.00	43.69	87	45.62	91	80-120	73-127	4	0-20	
Vinyl Chloride	50.00	52.14	104	54.76	110	67-127	57-137	5	0-20	
p/m-Xylene	100.0	91.94	92	97.31	97	75-125	67-133	6	0-25	
o-Xylene	50.00	46.36	93	49.35	99	75-125	67-133	6	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	45.37	91	52.62	105	70-124	61-133	15	0-20	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-08-1820

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6010B	EPA 3050B	598	ICP 7300	1
EPA 7471A	EPA 7471A Total	915	Mercury 04	1
EPA 8015B (M)	EPA 3550B	628	GC 48	1
EPA 8082	EPA 3540C	669	GC 31	1
EPA 8260B	EPA 5035	316	GC/MS FFF	2

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Glossary of Terms and Qualifiers

Work Order: 14-08-1820 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Chain-of-Custody Record

7960

Date: 8/25/14

Page 1 of 1

Project No.: 10627003a

Samplers (Signatures): [signature]

ANALYSES

Date	Time	Sample Number	Soil (S), Water (W), Vapor (V), or Other	EPA Method 8015	EPA Method 8020	EPA Method 8240	EPA Method 8270	TPHg by:	TPHd by:	EPA Method 8020 (BTEX)	TPH: 8015 MODIFIED	CARBON CHAIN	EPA 6010 EPA 7471		VOC - 8260/5035		EPA 8082					Acidified	No. of containers
8/25/14	0705	2-1	S								✓		✓		✓		✓						5
8/25/14	0725	2-2	S								✓		✓		✓		✓						5
	0735	2-3	S								✓		✓		✓		✓						5
	0750	2-4	S								✓		✓		✓		✓						5

REMARKS

Additional Comments

ADDRESS OF SITE SAMPLED
968 S. BERENDO LA

14-08-1820

Turnaround time: 24 HRS + 48 HRS

Results to: LINDA CONLON

Total No. of containers: 20

Relinquished by (signature):	Date:	Relinquished by (signature):	Date:	Relinquished by (signature):	Date:	Method of shipment:
Ted K Huang	8/25/14	[signature]	8/25/14			Delivery
Printed name: Ted K Huang	Time:	Printed name: Brent Soriano	Time:	Printed name:	Time:	Laboratory comments and Log No.:
Company: AMEC	1025	Company: EG	1025	Company:		
Received (signature):	Date:	Received by (signature):	Date:	Received by (signature):	Date:	
Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:	
Company:		Company:		Company:		

AMEC Geomatrix Consultants
~~510 Superior Ave.~~ 200
~~990 W. Bay Street~~, Suite ~~140~~
~~Newport Beach~~ ~~Costa Mesa~~, California 926~~27~~ 63
IRVINE
(949) 642-0245

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WORK ORDER #: 14-08-1620

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 08/25/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.7 °C - 0.3 °C (CF) = 3.4 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 8/26

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 8/26

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 15

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☑TerraCores® ☑ 2 02 P3

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 15

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 15

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 15

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APPENDIX C

ACM Summary Report including Laboratory Reports and Chain-of-Custody Documentation

September 18, 2013

Linda Conlan
AMEC Environment and Infrastructure
510 Superior Avenue, Suite 500
Newport Beach, California 92663

RE: Asbestos Sampling – Expansion Joint and Moisture Barrier Material
3200 Fruitland Avenue

Attn: Ms. Conlan

This report documents the findings from sampling of suspect asbestos-containing expansion joint and moisture barrier material conducted by California Certified Asbestos Consultant Robert Rinck (CAC #03-3374) and California Site Surveillance Technician Robert Pitzer (CSST #07-4235). The inspection was conducted at the former Pechiney facility located at 3200 Fruitland Avenue in Vernon, California.

Executive Summary

The following materials were determined to contain asbestos at greater than 1%, defined as Asbestos Containing Materials (ACM):

- Expansion Joint Material: 35 square feet located at Building 112, 33-36/C-D
- Moisture Barrier: <1 square foot located at Building 104, H/45
- 9x9 Vinyl Floor Tile/Mastic: 14 square feet located at Building 112A, E/68

Sampling Methodology

Aurora collected 24 bulk samples of building materials. Twenty-one samples were analyzed by Polarized Light Microscopy (PLM) for Asbestos via EPA Method 600/R-93/116 "Method for Determination of Asbestos in Bulk Building Materials" by Environmental Microbiology Laboratory (EMLab), an EPA accredited laboratory located 1010 North Central Avenue in Glendale, California and three samples were analyzed by Polarized Light Microscopy (PLM) for Asbestos via EPA Method 600/R-93/116 "Method for Determination of Asbestos in Bulk Building Materials" by LA Testing Laboratory, an EPA accredited laboratory located 520 Mission Street in South Pasadena, California.

Laboratory Analysis

Table 1: ACM Sample Summary

Sample #	Material	Building	Location	Amount	Result
1ACM-091213	Expansion Joint; black	112	Excavation; 33-36/C-D	35 SF	**10% Chrysotile**
1ACM-091613	Expansion Joint; black	110	N exterior wall at beam	Throughout	None Detected
2ACM-091613	Expansion Joint; black	104	W exterior wall at beam	Throughout	None Detected
112A-01	Expansion Joint; black	112A	S exterior wall at beam	Throughout	None Detected
112A-02	Expansion Joint; black	112A	S loading dock	Throughout	None Detected
112A-03	Expansion Joint; black	112A	W exterior wall at beam	Throughout	None Detected
112A-04	Moisture barrier	112A	Beam at S wall	Throughout	None Detected
112A-05	Expansion Joint; black	112A	E exterior wall	Throughout	None Detected
112A-06	Expansion Joint; black	112A	Interior slab union	Throughout	None Detected
112A-07	Expansion Joint; black tar	112A	Interior track/concrete	Throughout	None Detected
112A-08	Moisture barrier	104	Grid 45/H former RR	<1 SF	**20% Chrysotile**
112-01	Expansion Joint; black	112	E exterior wall at 43	Throughout	None Detected
112-02	Expansion Joint; black	112	Interior slab union	Throughout	None Detected
112-03	Expansion Joint; black	112	W exterior wall at 40	Throughout	None Detected
112-04	Expansion joint w/wood	112	Interior slab union	Throughout	None Detected
112-05	Expansion Joint; black	112	Interior slab union	Throughout	None Detected
112-06	Expansion Joint; black	112	E exterior wall at 13	Throughout	None Detected
104-01	Expansion Joint; black	104	S exterior wall at 45	Throughout	None Detected
104-02	Expansion Joint; black	104	Interior slab union	Throughout	None Detected
108-01	Expansion Joint; black	108	N exterior wall at H	Throughout	None Detected
108-02	Expansion Joint; black	108	Interior slab union	Throughout	None Detected
106-01	Metal beam coating	106	Wall/beam at I/3	12 SF	None Detected
106-02	Expansion Joint; black	106	N exterior wall at I/3	Throughout	None Detected
106-03	Expansion Joint; black	106	Interior slab union A/5	Throughout	None Detected
015-01*	9x9 VFT/mastic, green	112A	E/68	14 SF	**3% Chrysotile**

SF = Square Feet * Aurora Report December 2005

Discussion/Recommendations

The California Environmental Protection Agency (Cal/EPA) defines asbestos containing material (ACM) as containing asbestos in an amount greater or equal than 1%. The local enforcement agency for Cal/EPA is the South Coast Air Quality District (SCAQMD).

CalOSHA 8CCR1529, 8CCR 5208 and all other applicable federal, state, and local regulations regarding the maintenance, removal, transport and disposal of ACM should be applied. Notification to SCAQMD whenever 100 square feet or linear feet of ACM or more will be disturbed is also required.

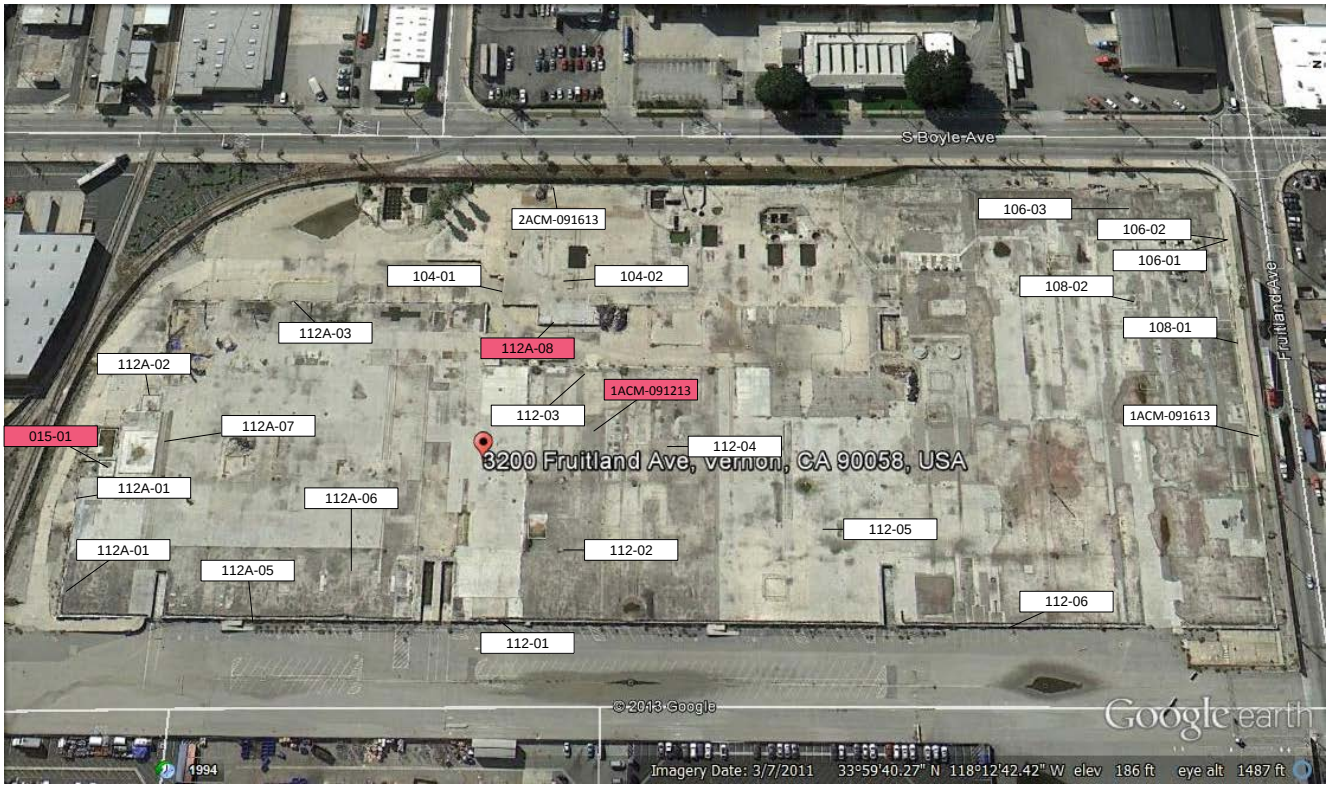
The expansion joint material at 33-36/C/D, the moisture barrier at 45/H and the floor tile and mastic at 68/E were determined to be ACM. Any additional suspect materials discovered during renovation/demolition should be tested prior to disturbance.

Sincerely,

Grace M. Rinck, CIH, CAC
Principal Consultant

Attachments: Sampling Diagram, Laboratory Analysis & Chain-of-Custody Form

Asbestos Sample Location Map



= Positive Sample Locations

Photos

Excavation area with ACM expansion joint material

Moisture barrier at 45/H

9x9 vinyl floor tile at 68/E

Report for:

Mr. Robert Rinck
Aurora Industrial Hygiene, Inc.
1132 Mission St
Suite B
South Pasadena, CA 91030

Regarding: Project: 25723; Pechiney
EML ID: 1114596

Approved by:

Approved Signatory
Roshanak Kalantari

Dates of Analysis:
Asbestos-EPA Method 600/R-93/116: 09-17-2013

Service SOPs: Asbestos-EPA Method 600/R-93/116 (EPA-600/M4-82-020 (SOP 01267))

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K
1010 N Central Avenue, Glendale, CA 91202
(866) 465-6653 Fax (858) 569-5806 www.emlab.com

Client: Aurora Industrial Hygiene, Inc.
C/O: Mr. Robert Rinck
Re: 25723; Pechiney

Date of Sampling: 09-17-2013
Date of Receipt: 09-17-2013
Date of Report: 09-17-2013

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Total Samples Submitted:	21
Total Samples Analysed:	21
Total Samples with Layer Asbestos Content > 1%:	1

Location: 112A-01, Expansion joint

Lab ID-Version‡: 5028420-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Good

Location: 112A-02, Expansion joint

Lab ID-Version‡: 5028421-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Good

Location: 112A-03, Expansion joint

Lab ID-Version‡: 5028422-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Good

Location: 112A-04, Moisture barrier

Lab ID-Version‡: 5028423-1

Sample Layers	Asbestos Content
Black Non-Fibrous Material	ND
Sample Composite Homogeneity:	Good

Location: 112A-05, Expansion joint

Lab ID-Version‡: 5028424-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
1010 N Central Avenue, Glendale, CA 91202
(866) 465-6653 Fax (858) 569-5806 www.emlab.com

Client: Aurora Industrial Hygiene, Inc.
C/O: Mr. Robert Rinck
Re: 25723; Pechiney

Date of Sampling: 09-17-2013
Date of Receipt: 09-17-2013
Date of Report: 09-17-2013

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 112A-06, Expansion joint

Lab ID-Version‡: 5028425-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 112A-07, Expansion joint

Lab ID-Version‡: 5028426-1

Sample Layers	Asbestos Content
Black Non-Fibrous Material	ND
Sample Composite Homogeneity:	Good

Location: 112A-08, Insulation

Lab ID-Version‡: 5028427-1

Sample Layers	Asbestos Content
Black/White Semi-Fibrous Material (Insulation)	20% Chrysotile
Sample Composite Homogeneity:	Good

Location: 112-01, Exp. joint

Lab ID-Version‡: 5028428-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
1010 N Central Avenue, Glendale, CA 91202
(866) 465-6653 Fax (858) 569-5806 www.emlab.com

Client: Aurora Industrial Hygiene, Inc.
C/O: Mr. Robert Rinck
Re: 25723; Pechiney

Date of Sampling: 09-17-2013
Date of Receipt: 09-17-2013
Date of Report: 09-17-2013

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 112-02, Exp. joint

Lab ID-Version‡: 5028429-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	25% Cellulose
Sample Composite Homogeneity:	Good

Location: 112-03, Exp. joint

Lab ID-Version‡: 5028430-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Good

Location: 112-04, Small joint

Lab ID-Version‡: 5028431-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 112-05, Exp. joint

Lab ID-Version‡: 5028432-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	25% Cellulose
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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(866) 465-6653 Fax (858) 569-5806 www.emlab.com

Client: Aurora Industrial Hygiene, Inc.
C/O: Mr. Robert Rinck
Re: 25723; Pechiney

Date of Sampling: 09-17-2013
Date of Receipt: 09-17-2013
Date of Report: 09-17-2013

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 112-06, Exp. joint

Lab ID-Version‡: 5028433-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Good

Location: 104-01, Exp. joint

Lab ID-Version‡: 5028434-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	40% Cellulose 5% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: 104-02, Exp. joint

Lab ID-Version‡: 5028435-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Good

Location: 108-01, Exp. joint

Lab ID-Version‡: 5028436-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

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‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
1010 N Central Avenue, Glendale, CA 91202
(866) 465-6653 Fax (858) 569-5806 www.emlab.com

Client: Aurora Industrial Hygiene, Inc.
C/O: Mr. Robert Rinck
Re: 25723; Pechiney

Date of Sampling: 09-17-2013
Date of Receipt: 09-17-2013
Date of Report: 09-17-2013

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 108-02, Exp. joint

Lab ID-Version‡: 5028437-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 106-01, Coating

Lab ID-Version‡: 5028438-1

Sample Layers	Asbestos Content
Black Non-Fibrous Material	ND
Sample Composite Homogeneity:	Good

Location: 106-02, Exp. joint

Lab ID-Version‡: 5028439-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 106-03, Exp. joint

Lab ID-Version‡: 5028440-1

Sample Layers	Asbestos Content
Black Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

CHAIN OF CUSTODY
www.EMLabPK.com

EMLab P&K
A TestAmerica Company

New Jersey: 3000 Lincoln Drive East, Suite A, Marlton, NJ 08053 * (856) 871-1984
Phoenix, AZ: 1501 West Knudsen drive, Phoenix, AZ 85027 * (800) 651-4002
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 888-6653

Weather	Fog	Rain	Snow	Wind	Clear
None	☐	☐	☐	☐	☐
Light	☐	☐	☐	☐	
Moderate	☐	☐	☐	☐	
Heavy	☐	☐	☐	☐	

Level

001114596

CONTACT INFORMATION

Company:	AURORA	Address:	
Contact:	BOB Rinck	Special Instructions:	
Phone:	213 445-9836		

PROJECT INFORMATION

Project ID:	25723		
Project Description:	PECHINEY		
Project Zip Code:		Sampling Date & Time:	9/17/13
PO Number:		Sampled By:	R. Rinck

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
NO – Next Business Day
SD – Same Business Day Rush
WH – Weekend / Holiday

Rushes received after 2 pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

REQUESTED (Use checkbox)

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume / Area (as applicable)	Notes (Time of day, Temp, RH, etc.)	Non-Culturable: Spore Trap – Fungi – Spore Trap Analysis	Spore Trap – Spore Trap Analysis – Other particles	Tape Swab Bulk – Direct Microscopic Exam (Qualitative)	Tape Swab Bulk – Quantitative Spore Count Direct Exam	Culturable: BioCassette™, Anderson, SAS, Swab, Water, Bulk, Dust, Soil, Contact Plates – 1-Media Surface Fungi (Genus ID + Asp. spp.)	2-Media Surface Fungi (Genus ID + Asp. spp.)	3-Media Surface Fungi (Genus ID + Asp. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	Gram Stain & Counts (Culturable Air & Surface Bacteria)	Legionella culture	Total Coliform, E. coli (Presence/Absence)	Membrane Filtration (Specify organism):	MPN Bacteria (Specify organism):	Quanti Tray – Sewage Screen	Other Requests: Asbestos Analysis – PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Analysis – PLM (EPA method 600/R-93-116)	PCR (Specify test):	
112A-01	EXPANSION JOINT	B	SD																				
02	"																						
03	"																						
04	MOISTURE BARRIER				NO STOP ON POSITIVE																		
05	EXPANSION JOINT																						
06	"																						
07	"																						
08	INSULATION																						
112-01	EXP. JOINT																						
02	"																						
03	"																						

SAMPLE TYPE CODES

BC – BioCassette™	ST – Spore Trap: Zefon, Allergenco, Burkard ...	T – Tape	D – Dust
ATS – Anderson		SW – Swab	SO – Soil
SAS – Surface Air Sampler	P – Potable Water	B – Bulk	
CP – Contact Plate	NP – Non-Potable Water	O – Other:	

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
	9/17/13 1300		9/17/13 1:00 pm

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CHAIN OF CUSTODY
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EMLab P&K
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New Jersey: 3000 Lincoln Drive East, Suite A, Marlton, NJ 08053 * (856) 071-1984
Phoenix, AZ: 1501 West Knudsen drive, Phoenix, AZ 85027 * (800) 651-4802
San Bruno, CA: 1750 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 888-6653

Weather	Fog	Rain	Snow	Wind	Clear
Level: None	☐	☐	☐	☐	☐
Light	☐	☐	☐	☐	
Moderate	☐	☐	☐	☐	
Heavy	☐	☐	☐	☐	

REQUESTED SE 001114596
(Use checkboxes)

CONTACT INFORMATION

Company:	AURORA	Address:	
Contact:		Special Instructions:	
Phone:			

PROJECT INFORMATION

Project ID:	25723		
Project Description:			
Project Zip Code:		Sampling Date & Time:	
PO Number:		Sampled By:	

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush
WH – Weekend / Holiday

Rushes received after 2 pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume / Area (as applicable)	Notes (Time of day, Temp, RH, etc.)
112-04	Stage Joint	B	SD		
05	EXP. Joint				
06	"				NO
104-01	"				
02	"				STOP ON
108-01	"				
02	"				POSITIVE
106-01	Control				
106-02	EXP. Joint				
106-03	"				

Non-Culturable				Culturable																	
Spore Trap		Tape Swab - Bulk		BioCassette™, Anderson, Sr... Water, Bulk, Dust, Soil, Contact Plates												Other/Rapids			
Fungi – Spore Trap Analysis	Spore Trap Analysis – Other particles	Direct Microscopic Exam (Qualitative)	Quantitative Spore Count Direct Exam	1-Media Surface Fungi (Genus ID + Asp. spp.)	2-Media Surface Fungi (Genus ID + Asp. spp.)	3-Media Surface Fungi (Genus ID + Asp. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	Gram Stain & Counts (Culturable Air & Surface Bacteria)	Legionella culture	Total Coliform, E. coli (Presence/Absence)	Membrane Filtration (specify organism):	MPN Bacteria (specify organism):	QuantiTray – Sewage Screen	Asbestos Analysis – PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Analysis – PLM (EPA method 600/R-93-116)	PCR (specify test):			
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

SAMPLE TYPE CODES

BC – BioCassette™	ST – Spore Trap: Zefon, Allergenco, Burkard ...	T – Tape	D – Dust
ATS – Anderson		SW – Swab	SO – Soil
SAS – Surface Air Sampler	P – Potable Water	B – Bulk	
CP – Contact Plate	NP – Non-Potable Water	O – Other:	

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
[signature]	9/17/13 1300	[signature]	9/17/13 1:00 PM

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2 of 2

LA Testing
520 Mission Street, South Pasadena, CA 91030
Phone/Fax: (323) 254-9960 / (323) 254-9982
http://www.LATesting.com pasadenalab@latesting.com

LA Testing Order:	321316233
CustomerID:	LAWE52AD
CustomerPO:	27584
ProjectID:	

Attn: **Rob Pitzer**
AMEC E&I, Inc.
2171 Campus Drive
Suite 100
Irvine, CA 92612

Phone:	(949) 224-0050
Fax:	(949) 224-0073
Received:	09/12/13 3:00 PM
Analysis Date:	9/12/2013
Collected:	9/12/2013

Project: **Former Pechiney Cast Plate Facility / 0106270030**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos				Asbestos	
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**%**	**Type**
1ACM-091213 *321316233-0001*		Black Fibrous Heterogeneous	7%	Cellulose	83%	Non-fibrous (other)	**10%**	**Chrysotile**

Analyst(s)

Rosa Mendoza (1)

Jerry Drapala Ph.D, Laboratory Manager
or other approved signatory

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Samples analyzed by LA Testing South Pasadena, CA NVLAP Lab Code 200232-0, CA ELAP 2283

Initial report from 09/12/2013 15:57:11

THIS IS THE LAST PAGE OF THE REPORT.

LA Testing
520 Mission Street, South Pasadena, CA 91030
Phone/Fax: (323) 254-9960 / (323) 254-9982
http://www.LATesting.com pasadenalab@latesting.com

LA Testing Order:	321316427
CustomerID:	LAWE52AD
CustomerPO:	
ProjectID:	

Attn: **AMEC E&I, Inc.**
2171 Campus Drive
Suite 100
Irvine, CA 92612

Phone:	(949) 224-0050
Fax:	(949) 224-0073
Received:	09/16/13 12:50 PM
Analysis Date:	9/16/2013
Collected:	9/16/2013

Project: **0106270030 PECHINEY FORMER CAST PLATE**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**% Type**
1 ACM-091613 *321316427-0001*		Black Non-Fibrous Heterogeneous	10%	Cellulose	90%	Non-fibrous (other)	**None Detected**
2 ACM-091613 *321316427-0002*		Black Non-Fibrous Homogeneous	10%	Cellulose	90%	Non-fibrous (other)	**None Detected**

Analyst(s)

Kieu-anh Pham Duong (1)
Rosa Mendoza (1)

Jerry Drapala Ph.D, Laboratory Manager
or other approved signatory

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Samples analyzed by LA Testing South Pasadena, CA NVLAP Lab Code 200232-0, CA ELAP 2283

Initial report from 09/16/2013 15:00:28

321316427

CHAIN-OF-CUSTODY RECORD

NB 27585

321316427

PROJECT NAME: PECHINEY FORMER CAST PLATE			DATE: 9/16/13 PAGE 1 OF 1
PROJECT NUMBER: 010627 0030	LABORATORY NAME: CA TESTING	CLIENT INFORMATION:	REPORTING REQUIREMENTS: EMAIL RESULTS TO
RESULTS TO:	LABORATORY ADDRESS: 520 MISSION ST.	AURORA I. H.	GRINCK@AURORAIH.COM
TURNAROUND TIME: 3 HR.	SOUTH PASADENA	ROBERT PITZER	RPITZER@AURORAIH.COM
SAMPLE SHIPMENT METHOD:	LABORATORY CONTACT:	626 679 3416	GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

DATE	TIME	SAMPLE NUMBER	PLM	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
9/16/13	11:00	1ACM-091613	X	BAG	O						BLACK VAPOR
↓	↓	2ACM-091613	↓	↓	O						BARRIOR

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	09/16/13	1220	SIGNATURE:	9/16/13	12:25
PRINTED NAME: Robert Pitzer			PRINTED NAME:		
COMPANY: Aurora I.H.			COMPANY:		
SIGNATURE:	9/16/13	1225	SIGNATURE:		
PRINTED NAME: Jonathan Pastrana			PRINTED NAME:		
COMPANY: American Integrated			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS:

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

321315813

NB 27271

CHAIN-OF-CUSTODY RECORD

DATE: 9/6/13 | PAGE 1 OF 1

PROJECT NAME: FORMER PECHINEY CAST PLATE

PROJECT NUMBER: 706270030

RESULTS TO: STEPHEN HUANG

TURNAROUND TIME: 3 HOUR

SAMPLE SHIPMENT METHOD:

LABORATORY NAME: LA TESTING

LABORATORY ADDRESS: SOUTH PASADENA

LABORATORY CONTACT:

LABORATORY PHONE NUMBER:

CLIENT INFORMATION: ROBERT PITZER 626 679 3410 LINDA CONZAN 949 355 3631

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

DATE	TIME	SAMPLE NUMBER	ACM	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
9/6/13		1 ACM-090613	X		G					1	BLACK TAR
↓		2 ACM-090613	X		G					1	↓
		3 ACM-090613	X		O					1	GREY CEMENT

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS: EMAIL RESULTS TO RPITZER@AURORAIH.COM GRINCK@AURORAIH.COM

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	9/6/13	1220PM	SIGNATURE:	9/6/13	12:29
PRINTED NAME: ROBERT PITZER			PRINTED NAME:		
COMPANY:			COMPANY: LAT		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

LA Testing
520 Mission Street, South Pasadena, CA 91030
Phone/Fax: (323) 254-9960 / (323) 254-9982
http://www.LATesting.com pasadenalab@latesting.com

LA Testing Order: 321406041
CustomerID: ARIH26
CustomerPO:
ProjectID:

Attn: **robert pitzer**
Aurora Industrial Hygiene
1132 Mission Street
Suite B
South Pasadena, CA 91030

Phone: (626) 403-4104
Fax:
Received: 04/09/14 3:15 PM
Analysis Date: 4/9/2014
Collected:

Project: **PECHINEY 0106270030**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**		**% Type**
1BULK-040914 *321406041-0001*	BLACK SLURRY @ LINE C-65	Gray/Silver Non-Fibrous Homogeneous		100%	Non-fibrous (other)	**None Detected**

Analyst(s)

Rosa Mendoza (1)

Jerry Drapala Ph.D, Laboratory Manager
or other approved signatory

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Samples analyzed by LA Testing South Pasadena, CA NVLAP Lab Code 200232-0, CA ELAP 2283

Initial report from 04/09/2014 16:21:23

THIS IS THE LAST PAGE OF THE REPORT.

OrderID: 321406041

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*): 321406041

LA TESTING
520 MISSION STREET
SOUTH PASADENA, CA 91030
PHONE: (800)-303-0047
FAX: (323)-254-9962

Company: AURORA INDUSTRIAL HYGIENE
Street: 3200 MISSION STREET STE B
City: SOUTH PASADENA **State/Province:** CA
Report To (Name): ROBERT PITZER
Email Address: RPITZER@AURORAIH.COM
Project Name/Number: PECHINEY 0/06270030
U.S. State Samples Taken: /

EMSL-Bill to: ☐ Same ☐ Different
If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party
Zip/Postal Code: 91030 **Country:** USA
Telephone #: 626 232 7450
Fax #: **Purchase Order:**
Please Provide Results: ☐)D[☐ (PDL0 ☐ ODL0 EMAIL
Connecticut Samples: ☐ Commercial ☐ Residential

Turnaround Time (TAT) Options* – Please Check

☒ 3 Hour | ☐ 6 Hour | ☐ 24 Hour | ☐ 48 Hour | ☐ 72 Hour | ☐ 96 Hour | ☐ 1 Week | ☐ 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to s an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air ☐ Check if samples are from NY
☐ NIOSH 7400
☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
☒ PLM EPA 600/R-93/116 (<1%)
☐ PLM EPA NOB (<1%)
Point Count
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/Gravimetric
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
☐ NYS 198.1 (friable in NY)
☐ NYS 198.6 NOB (non-friable-NY)
☐ NIOSH 9002 (<1%)

TEM – Air ☐ 4-4.5hr TAT (AHERA only)
☐ AHERA 40 CFR, Part 763
☐ NIOSH 7402
☐ EPA Level II
☐ ISO 10312

TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP
☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
Fibers >10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
☐ Microvac - ASTM D 5755
☐ Wipe - ASTM D6480
☐ Carpet Sonication (EPA 600/J-93/16

Soil/Rock/Vermiculite
☐ PLM CARB 435 - A (0.25% sensitivi
☐ PLM CARB 435 - B (0.1% sensitivity
☐ TEM CARB 435 - B (0.1% sensitivity
☐ TEM CARB 435 - C (0.01% sensitivi
☐ TEM Qual. via Filtration Technique
☐ TEM Qual. via Drop-Mount Techniqu

Other:
☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group** | **Filter Pore Size (Air Samples):** ☐ 0.8µm ☐ 0.45µm

Samplers Name: ROBERT PITZER **Samplers Signature:**

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1BULK-040914	BLACK SLURRY @ LINE C-65	BULK	4/9/14

Client Sample # (s): - **Total # of Samples:** 1
Relinquished (Client): ROBERT PITZER **Date:** 4/9/14 **Time:** 1438
Received (Lab): (RW) **Date:** 4/9/14 **Time:** 3:15pm
Comments/Special Instructions:
* RESULTS BY END OF DAY 4/9/19 IF POSIBLE

APPENDIX D

AIS Wipe Sample Results and Locations

Wipe Samples Collected by American Integrated Services, Inc.

Lab Report Date	Sample ID	PCB Detection Result ug/100 cm2	Status	Map Location	Phase Area
9/6/2013	Wipe Sample - A	ND	Equipment Sample	N/A	N/A
9/9/2013	Wipe Sample - A	ND	Recycled	1	I
9/12/2013	Wipe Sample - A	PCB - 1248 (2.5)	Disposed	2	I
	Wipe Sample - B	ND	Recycled	3	I
9/23/2013	Area - B	ND	Recycled	4	IIB
	Area - C	PCB - 1242 (27.2)	Disposed	5	IIB
	Pipe Sample	PCB - 1242 (3.4)	Disposed	6	IIB
10/21/2013	A - FDC	ND	Recycled	7	IIB
	B - FDC	ND	Recycled	8	IIB
12/4/2013	H - 5	ND	Recycled	9	I
	H - 15	ND	Recycled	10	I
	D - 5	ND	Recycled	11	I
	D - 15	ND	Recycled	12	I
	E - 5	ND	Recycled	13	I
	E - 15	ND	Recycled	14	I
	F - 5	ND	Recycled	15	I
	F -15	ND	Recycled	16	I
	Area - A - 1	ND	Recycled	17	I
	Area - A - 2	ND	Recycled	18	I
	Area - A - 3	ND	Recycled	19	I
	Area - C	ND	Recycled	20	IIB
	Area - P	ND	Recycled	21	I
	Stretcher Pit - 1	ND	Recycled	22	IIA
	Stretcher Pit - 2	ND	Recycled	23	IIA
2/5/2014	A - 5	ND	Recycled	24	I
	A - 10	ND	Recycled	25	I
	D - 20	ND	Recycled	26	I
	D - 25	ND	Recycled	27	IIA
	D - 30	ND	Recycled	28	IIA
	E - 20	ND	Recycled	29	I
	E - 25	ND	Recycled	30	IIA
	E - 30	ND	Recycled	31	IIA
	F - 20	ND	Recycled	32	I
	F - 25	ND	Recycled	33	IIA
	F - 30	ND	Recycled	34	IIA
	G - 20	ND	Recycled	35	I
	G - 25	ND	Recycled	36	IIA
	G - 30	ND	Recycled	37	IIA
	Substation #1	ND	Recycled	38	I
2/20/2014	Pipe Sample to Fruitland	1.76 (PCB-1248)	Left in place	39	I
	Draw Bench - B	ND	Recycled	41	IIA
	Draw Bench - C	ND	Recycled	42	IIA
	Trench Rack - A	0.43 (PCB-1248)	Disposed	43	I
	Trench Rack - B	0.96 (PCB-1248)	Disposed	44	I
	Trench Rack - C	0.34 (PCB-1248)	Disposed	45	I
	Line C	ND	Recycled	46	IIB
	Row 45	ND	Recycled	47	IIB
	A - 20	ND	Recycled	48	I
	A - 25	ND	Recycled	49	IIB
All samples from 4A/4B					
4/1/2014	1	1.82 (PCB-1248)	Disposed	50	IIB
	2	1.25 (PCB-1248)	Disposed	51	IIB
	3	1.55 (PCB-1248)	Disposed	52	IIB
	4	1.89 (PCB-1248)	Disposed	53	IIB
	5	6.11 (PCB-1248)	Disposed	54	IIB
	6	1.79 (PCB-1248)	Disposed	55	IIB
	7	2.18 (PCB-1248)	Disposed	56	IIB
	8	0.38 (PCB-1248)	Disposed	57	IIB
	9	2.21 (PCB-1248)	Disposed	58	IIB
	10	0.25 (PCB-1248)	Disposed	59	IIB
	11	0.78 (PCB-1248)	Disposed	60	IIB
	12	0.11 (PCB-1248)	Disposed	61	IIB
	13	1.52 (PCB-1248)	Disposed	62	IIB
6/9/2014	E-40	ND	Recycled	63	IIA
	E-50	ND	Recycled	64	IV
	F-40	ND	Recycled	65	IIA
	F-50	ND	Recycled	66	IV
	G-40	ND	Recycled	67	IIA
	G-50	ND	Recycled	68	IV
6/16/2014	D-40	ND	Recycled	70	IIA
	D-50	ND	Recycled	71	IV
	D-60	ND	Recycled	72	IV
	E-60	ND	Recycled	73	IV
	F-60	ND	Recycled	74	IV
	G-60	ND	Recycled	75	IV
	H-30	ND	Recycled	76	IIA
	Cooling Tower-1	ND	Disposed	77	III
	Cooling Tower-2	0.815 (PCB-1248)	Disposed	78	III
	Cooling Tower-3	ND	Disposed	79	III
	Row 65 Pipe-1	ND	Recycled	80	IV
	Row 65 Pipe-2	ND	Recycled	81	IV
	Row 69 Pipe-1	ND	Recycled	82	IV
	Row 69 Pipe-2	ND	Recycled	83	IV
	Row 69 Pipe-3	ND	Recycled	84	III

Notes:
N/A = Not applicable
ND = Not Detected
ug/100 cm2 = micrograms per 100 centimeters squared
EPA Method 8082

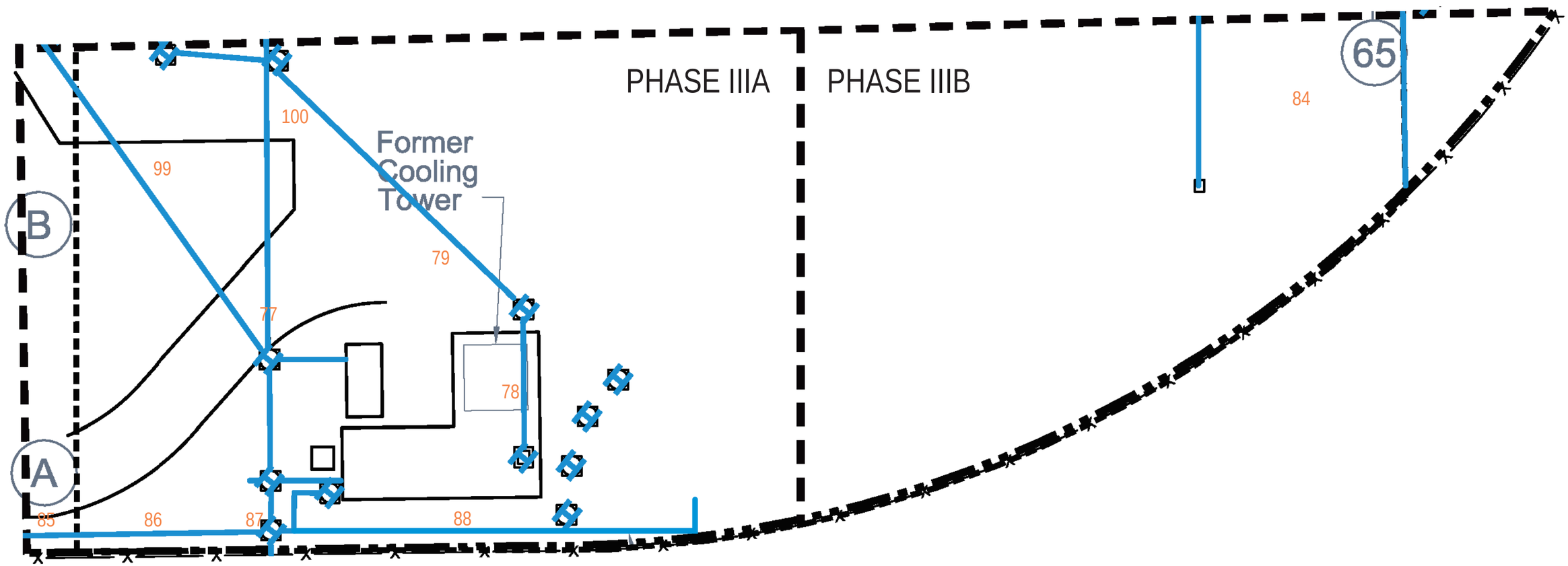
Wipe Samples Collected by American Integrated Services, Inc.

Lab Report Date	Sample ID	PCBs 1248	PCBs 1260	Status	Map Location	Phase Area
6/26/2014	Boyle Pipe-1	ND	ND	Disposed	85	III
	Boyle Pipe-2	ND	ND	Disposed	86	III
	Boyle Pipe-3	99.2	4.26	Disposed	87	III
	Boyle Pipe-4	ND	ND	Disposed	88	III
	Boyle Pipe-5	363	6.91	Disposed	89	IIB
	Boyle Pipe-6	6.41	ND	Disposed	90	IIB
	Boyle Pipe-7	182	6.34	Disposed	91	IIB
	Boyle Pipe-8	122	3.18	Disposed	92	IIB
	Boyle Pipe-9	7.49	ND	Disposed	93	IIB
	Boyle Pipe-10	1.72	ND	Disposed	94	IIB
	Boyle Pipe-11	1.65	ND	Disposed	95	IIB
	Boyle Pipe-12	ND	ND	Disposed	96	IIB
	Boyle Pipe-13	ND	ND	Disposed	97	IIB
	Boyle Pipe-14	ND	ND	Disposed	98	IIB
	Cooling Tower-1	ND	ND	Disposed	99	III
	Cooling Tower-2	ND	ND	Disposed	100	III
	Parcel 6-1	ND	ND	Recycled	101	V
	Parcel 6-2	ND	ND	Recycled	102	V
	Parcel 6-3	ND	ND	Recycled	103	V
	Parcel 6-4	ND	ND	Recycled	104	V
	Parcel 6-5	ND	ND	Recycled	105	V
	RR Tracks-1	ND	ND	Recycled	106	RR SPUR
	RR Tracks-2	ND	ND	Recycled	107	RR SPUR
	RR Tracks-3	ND	ND	Recycled	108	RR SPUR
	RR Tracks-4	ND	ND	Recycled	109	RR SPUR
	RR Tracks-5	ND	ND	Recycled	110	RR SPUR
	RR Tracks-6	ND	ND	Recycled	111	RR SPUR
	RR Tracks-7	ND	ND	Recycled	112	RR SPUR
	RR Tracks-8	ND	ND	Recycled	113	V
	RR Tracks-9	ND	ND	Recycled	114	V
	RR Tracks-10	ND	ND	Recycled	115	V
7/10/2014	Phase IV-1	ND	ND	Recycled	116	IIA
	Phase IV-2	ND	ND	Recycled	117	IIA
	Phase IV-3	ND	ND	Recycled	118	IIA
	Phase IV-4	ND	ND	Recycled	119	IIA
	Phase IV-5	ND	ND	Recycled	120	IIA
	Phase IV-6	ND	ND	Recycled	121	IIA
	Phase IV-7	ND	ND	Recycled	122	IV
	Phase IV-8	ND	ND	Recycled	123	IV
	Phase IV-9	ND	ND	Recycled	124	IV
	Phase IV-10	ND	ND	Recycled	125	IV
	Phase IV-11	ND	ND	Recycled	126	IV
	Phase IV-12	ND	ND	Recycled	127	IV
	Phase IV-13	ND	ND	Recycled	128	IV
	Phase IV-14	ND	ND	Recycled	129	IV
	Phase IV-15	ND	ND	Recycled	130	IV
	Phase V-1	ND	ND	Recycled	131	V
	Phase V-2	ND	ND	Recycled	132	V
	Phase V-3	ND	ND	Recycled	133	V
	Phase V-4	ND	ND	Recycled	134	V
	Phase V-5	ND	ND	Recycled	135	V
	FDC1-1	ND	ND	Recycled	136	IIB
	FDC1-2	ND	ND	Recycled	137	IIB
	FDC4-1	ND	ND	Recycled	138	IIB
	FDC4-2	ND	ND	Recycled	139	IIB

Notes
N/A = Not applicable
ND = Not Detected
ug/100 cm2 = micrograms per 100 centimeters squared
EPA Method 8082

LEGEND

REMOVED PIPE/MANHOLE/FLOOR DRAIN/CAP



PHASE III - PIPE REMOVALS
BELOW GRADE DEMOLITION & SOIL EXCAVATION
PECHINEY CAST PLATE, INC., FACILITY
3200 FRUITLAND AVENUE, VERNON, CALIFORNIA

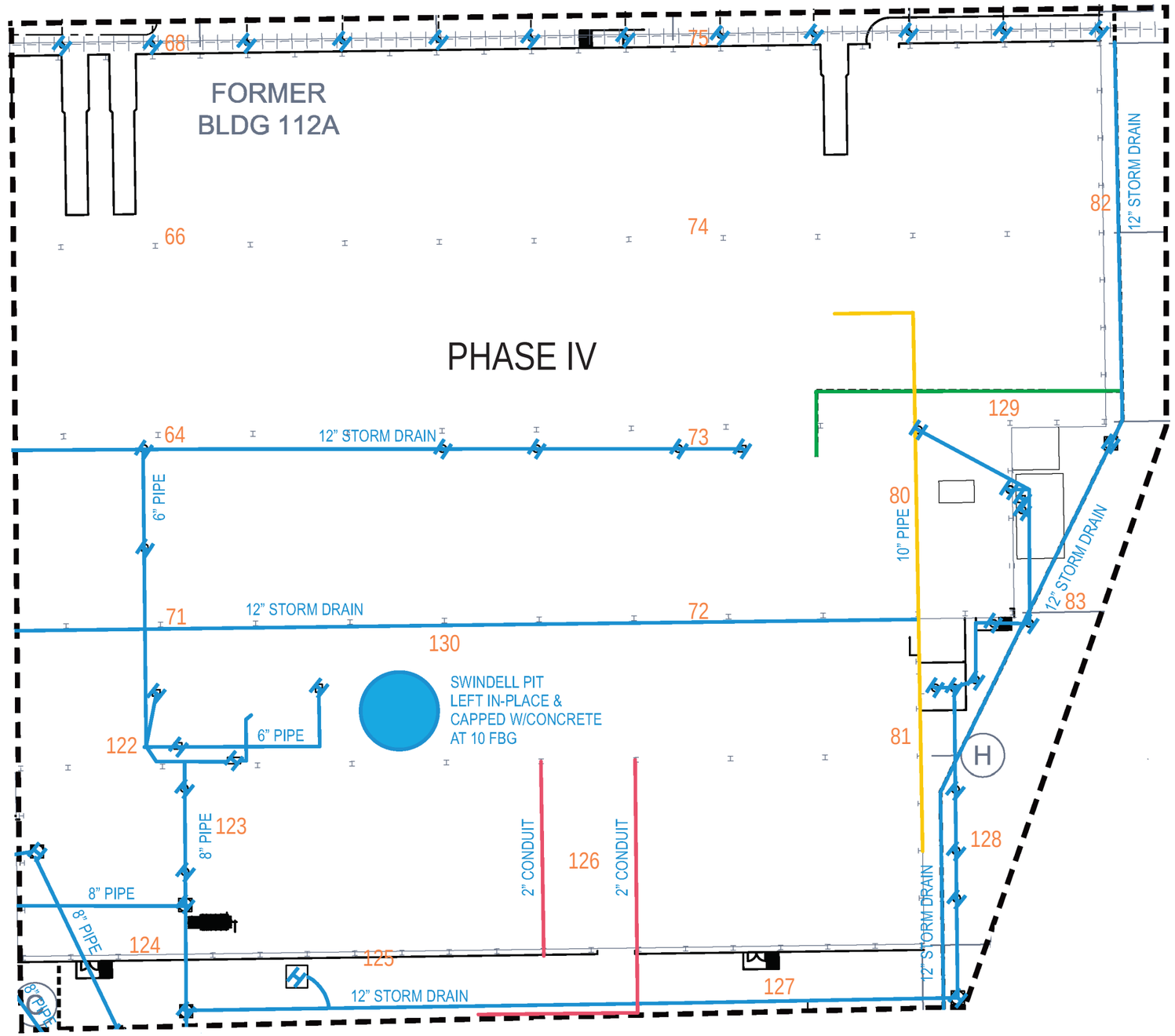
N

DRAWN BY: CY
APPROVED BY: CP
DATE: 08/20/14

American Integrated Services, Inc.
P.O. BOX 92316, LONG BEACH, CA 90809-2316 (310) 522-1168 FAX (310) 522-0474

LEGEND

- REMOVED PIPE/MANHOLE/FLOOR DRAIN/CAP
- NOT ENCOUNTERED
- NEW PIPE ENCOUNTERED
- CONDUIT
- SWINDELL PIT (CAPPED & LEFT IN-PLACE)



PHASE IV - PIPE REMOVALS
BELOW GRADE DEMOLITION & SOIL EXCAVATION
PECHINEY CAST PLATE, INC., FACILITY
3200 FRUITLAND AVENUE, VERNON, CALIFORNIA

N

DRAWN BY: CY
APPROVED BY: CP
DATE: 08/20/14

American Integrated Services, Inc.
P.O. BOX 92316, LONG BEACH, CA 90809-2316 (310) 522-1168 FAX (310) 522-0474

Alpha Scientific Corporation
Environmental Laboratories

02-05-2014

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 01-28-2014
Lab Job No.: A401074

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 01-28-2014 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AA29-PCBS1

Lab Job No.: A401074

Date Sampled: 01-28-2014
Date Received: 01-28-2014
Date Extracted: 01-28-2014
Date Analyzed: 01-29-2014
Date Reported: 02-05-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
A-5	A401074-1	1	ND	ND	ND	ND	ND	ND	ND
A-10	A401074-2	1	ND	ND	ND	ND	ND	ND	ND
D-20	A401074-3	1	ND	ND	ND	ND	ND	ND	ND
D-25	A401074-4	1	ND	ND	ND	ND	ND	ND	ND
D-30	A401074-5	1	ND	ND	ND	ND	ND	ND	ND
E-20	A401074-6	1	ND	ND	ND	ND	ND	ND	ND
E-25	A401074-7	1	ND	ND	ND	ND	ND	ND	ND
E-30	A401074-8	1	ND	ND	ND	ND	ND	ND	ND
F-20	A401074-9	1	ND	ND	ND	ND	ND	ND	ND
F-25	A401074-10	1	ND	ND	ND	ND	ND	ND	ND
F-30	A401074-11	1	ND	ND	ND	ND	ND	ND	ND
G-20	A401074-12	1	ND	ND	ND	ND	ND	ND	ND
G-25	A401074-13	1	ND	ND	ND	ND	ND	ND	ND
G-30	A401074-14	1	ND	ND	ND	ND	ND	ND	ND
Substation #1	A401074-15	1	ND	ND	ND	ND	ND	ND	ND
Trip Blank	A401074-16	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank;
DF=Dilution Factor; ND=Not Detected (below DF × MDL).

02-05-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A401074
Project:	Pechiney/33210		
Matrix:	Solid	Lab Sample ID:	TE401068-4
Batch No.	AA29-PCBS1	Date Analyzed:	01-29-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.530	0.525	106.0	105.0	0.9	30	46-127
1260	ND	0.5	0.468	0.460	93.6	92.0	1.7	30	31-134

II. LCS Result
Unit: ppb

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.493	0.5	98.6	80-120
1260	0.428	0.5	85.6	80-120

ND: Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number A401074

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: PELAYO | Phone: 310-522-1168 | Fax: 310-522-0474 | Sampled by: PELAYO

Project Name/No.: PEARLINEY/33210 | Project Site: 3200 FRUITLAND AVE. VERNON CA

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☑ Normal

Sample Condition: ☐ Chilled ☑ Intact ☐ Sample seals

Analyses Requested

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
D-20	A401074-3	1/28/14	230pm	WIPE	N/A	1, 20mlgl							X						
D-25	-4	1/28/14	235pm	WIPE	N/A	1, 20mlgl							X						
D-30	-5	1/28/14	240pm	WIPE	N/A	1, 20mlgl							X						
E-20	-6	1/28/14	245pm	WIPE	N/A	1, 20mlgl							X						
E-25	-7	1/28/14	250pm	WIPE	N/A	1, 20mlgl							X						
E-30	-8	1/28/14	255pm	WIPE	N/A	1, 20mlgl							X						
F-20	-9	1/28/14	300pm	WIPE	N/A	1, 20mlgl							X						
F-25	-10	1/28/14	305pm	WIPE	N/A	1, 20mlgl							X						
F-30	-11	1/28/14	310pm	WIPE	N/A	1, 20mlgl							X						
G-20	-12	1/28/14	315pm	WIPE	N/A	1, 20mlgl							X						
G-25	-13	1/28/14	320pm	WIPE	N/A	1, 20mlgl							X						
G-30	-14	1/28/14	325pm	WIPE	N/A	1, 20mlgl							X						
A-5	-1	1/28/14	330pm	WIPE	N/A	1, 20mlgl							X						
A-10	-2	1/28/14	335pm	WIPE	N/A	1, 20mlgl							X						
SUBSTATION #1	-15	1/28/14	340pm	WIPE	N/A	1, 20mlgl							X						
TRIP BLANK	-16	1/28/14	345pm	WIPE	N/A	1, 20mlgl							X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[illegible]	AIS	1/24/14	520pm	[illegible]	ASC	1/28/14	5:20pm
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

02-20-2014

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 02-17-2014
Lab Job No.: A402051

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 02-17-2014 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client:	American Integrated Services	Lab Job No.:	A402051
Project:	Pechiney/33210		
Project Site:	3200 Fruitland Ave., Vernon, CA 90058	Date Sampled:	02-17-2014
Matrix:	Wipe sample	Date Received:	02-17-2014
Extraction Method:	EPA 3550B	Date Extracted:	02-17-2014
Batch No.	AB18-PCBS1	Date Analyzed:	02-18-2014
		Date Reported:	02-20-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm²

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
"A" (Pipe Sample To Fruitland)	A402051-1	1	ND	ND	ND	ND	1.76	ND	ND
"B" (Draw Bench)	A402051-2	1	ND	ND	ND	ND	ND	ND	ND
"C" (Draw Bench)	A402051-3	1	ND	ND	ND	ND	ND	ND	ND
"D" (Trench Rack -A)	A402051-4	1	ND	ND	ND	ND	0.43	ND	ND
"E" (Trench Rack -B)	A402051-5	1	ND	ND	ND	ND	0.96	ND	ND
"F" (Trench Rack -C)	A402051-6	1	ND	ND	ND	ND	0.34	ND	ND
"G" (Line C)	A402051-7	1	ND	ND	ND	ND	ND	ND	ND
"H" (Row 45)	A402051-8	1	ND	ND	ND	ND	ND	ND	ND
"I" (A-20)	A402051-9	1	ND	ND	ND	ND	ND	ND	ND
"J" (A-25)	A402051-10	1	ND	ND	ND	ND	ND	ND	ND
Trip Blank	A402051-11	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank;
DF=Dilution Factor; ND=Not Detected (below DF × MDL).

02-20-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A402051
Project:	Pechiney/33210		
Matrix:	Soil	Lab Sample ID:	TE402042-11
Batch No.	AB18-PCBS1	Date Analyzed:	02-18-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.513	0.520	102.6	104.0	1.4	30	46-127
1260	ND	0.5	0.433	0.438	86.6	87.6	1.1	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.505	0.5	101.0	80-120
1260	0.418	0.5	83.6	80-120

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number A402051

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention:

Phone: 310-522-1168

Fax: 310-522-0474

Sampled by: PELAYO

Project Name/No.: PECHINEY / 33210

Project Site: 3200 FRUITLAND AVE. VERNON CA

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☒ Normal

Sample Condition: ☒ Chilled ☒ Intact ☐ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
"A" (PIPE SAMPLE TO FRUITLAND)	A402051-1	2/17/14	105pm	WIPE	N/A	1, 20mL gl.							X						
"B" (DRAWBENCH)	-2	2/17/14	110pm	WIPE	N/A	1, 20mL gl.							X						
"C" (DRAWBENCH	-3	2/17/14	115pm	WIPE	N/A	1, 20mL gl.							X						
"D" (TRENCH RACK -A)	-4	2/17/14	120 pm	WIPE	N/A	1, 20mL gl							X						
"E" (TRENCH RACK -B)	-5	2/17/14	125 pm	WIPE	N/A	1, 20mL gl.							X						
"F" (TRENCH RACK -C)	-6	2/17/14	130 pm	WIPE	N/A	1, 20mL gl.							X						
"G" (LINE C)	-7	2/17/14	135 PM	WIPE	N/A	1, 20mL gl.							X						
"H" (ROW 45)	-8	2/17/14	140 PM	WIPE	N/A	1, 20mL gl.							X						
"I" (A-20)	-9	2/17/14	145 PM	WIPE	N/A	1, 20mL gl							X						
"J" (A-25)	-10	2/17/14	150 PM	WIPE	N/A	1, 20 mL gl.							X						
TRIP BLANK	-11	2/17/14	155 PM	WIPE	N/A	1, 20mL gl							X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[illegible]	AIS	2/17/14	5:05pm	[illegible]	ASC	2/17/14	5:05pm

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

04-01-2014

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 03-27-2014
Lab Job No.: A403088

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 03-27-2014 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client:	American Integrated Services	Lab Job No.:	A403088
Project:	Pechiney/33210		
Project Site:	3200 Fruitland Ave., Vernon, CA 90058	Date Sampled:	03-27-2014
Matrix:	Wipe sample	Date Received:	03-27-2014
Extraction Method:	EPA 3550B	Date Extracted:	03-27-2014
Batch No.	AC28-PCBS1	Date Analyzed:	03-28-2014
		Date Reported:	04-01-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
1	A403088-1	1	ND	ND	ND	ND	1.82	ND	ND
2	A403088-2	1	ND	ND	ND	ND	1.25	ND	ND
3	A403088-3	1	ND	ND	ND	ND	1.55	ND	ND
4	A403088-4	1	ND	ND	ND	ND	1.89	ND	ND
5	A403088-5	1	ND	ND	ND	ND	6.11	ND	ND
6	A403088-6	1	ND	ND	ND	ND	1.79	ND	ND
7	A403088-7	1	ND	ND	ND	ND	2.18	ND	ND
8	A403088-8	1	ND	ND	ND	ND	0.38	ND	ND
9	A403088-9	1	ND	ND	ND	ND	2.21	ND	ND
10	A403088-10	1	ND	ND	ND	ND	0.25	ND	ND
11	A403088-11	1	ND	ND	ND	ND	0.78	ND	ND
12	A403088-12	1	ND	ND	ND	ND	0.11	ND	ND
13	A403088-13	1	ND	ND	ND	ND	1.52	ND	ND
TB (Trip Blank)	A403088-14	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank;
DF=Dilution Factor; ND=Not Detected (below DF × MDL).

04-01-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A403088
Project:	Pechiney/33210		
Matrix:	Solid	Lab Sample ID:	SS403028-1
Batch No.	AC28-PCBS1	Date Analyzed:	03-28-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.571	0.537	114.2	107.4	6.1	30	46-127
1260	ND	0.5	0.503	0.473	100.6	94.6	6.1	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.533	0.5	106.6	80-120
1260	0.457	0.5	91.4	80-120

ND:Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number A403088

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: PELAYO

Phone: 310-522-1168

Fax: 310-522-0474

Sampled by: C. PELAYO

Project Name/No.: PELHINEY/33210

Project Site: 3200 FRUITLAND AVE, VERNON CA 90058

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☑ Normal

Sample Condition: ☐ Chilled ☑ Intact ☐ Sample seals

Analyses Requested

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
1	A403088-1	3/27/14	1300	WIPE		1, 20ml gl							X						
2	-2	3/27/14	1305	WIPE		1, 20ml gl							X						
3	-3	3/27/14	1310	WIPE		1, 20ml gl							X						
4	-4	3/27/14	1315	WIPE		1, 20ml gl							X						
5	-5	3/27/14	1320	WIPE		1, 20ml gl							X						
6	-6	3/27/14	1325	WIPE		1, 20ml gl							X						
7	-7	3/27/14	1330	WIPE		1, 20ml gl							X						
8	-8	3/27/14	1335	WIPE		1, 20ml gl							X						
9	-9	3/27/14	1340	WIPE		1, 20ml gl							X						
10	-10	3/27/14	1345	WIPE		1, 20ml gl							X						
11	-11	3/27/14	1350	WIPE		1, 20ml gl							X						
12	-12	3/27/14	1355	WIPE		1, 20ml gl							X						
13	-13	3/27/14	1400	WIPE		1, 20ml gl							X						
TB (TRIP BLANK)	-14	3/27/14	1405	WIPE		1, 20ml gl							X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
Jonathan Rustrano	AIS	3/27/14	5:59p	Melinda Li	ASL	3-27-14	5:50pm
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report. PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

06-09-2014

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: 33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 06-05-2014
Lab Job No.: A406011

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 06-05-2014 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: 33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AF06-PCBS1

Lab Job No.: A406011

Date Sampled: 06-05-2014
Date Received: 06-05-2014
Date Extracted: 06-05-2014
Date Analyzed: 06-06-2014
Date Reported: 06-09-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
E40	A406011-1	1	ND	ND	ND	ND	ND	ND	ND
E50	A406011-2	1	ND	ND	ND	ND	ND	ND	ND
F40	A406011-3	1	ND	ND	ND	ND	ND	ND	ND
F50	A406011-4	1	ND	ND	ND	ND	ND	ND	ND
G40	A406011-5	1	ND	ND	ND	ND	ND	ND	ND
G50	A406011-6	1	ND	ND	ND	ND	ND	ND	ND
TB (Trip Blank)	A406011-7	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank;
DF=Dilution Factor; ND=Not Detected (below DF × MDL).

06-09-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A406011
Project:	33210		
Matrix:	Solid	Lab Sample ID:	SS406006-1
Batch No.	AF06-PCBS1	Date Analyzed:	06-06-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.531	0.536	106.2	107.2	0.9	30	46-127
1260	ND	0.5	0.513	0.525	102.6	105.0	2.3	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.516	0.5	103.2	80-120
1260	0.495	0.5	99.0	80-120

ND:Not Detected (at the specified limit).

ALPHA SCIENTIFIC COR RATION

CHAIN OF CUSTODY RECORD

Lab Job Number A406011

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: PELAYO

Phone: 310-522-1168

Fax: 310-522-0474

Sampled by: PELAYO

Project Name/No.: 33210

Project Site: 3200 FRUITLAND AVE, VERNON CA

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☑ 2-3 days ☐ Normal

Sample Condition: ☐ Chilled ☑ Intact ☐ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
E40	A406011-1	6/5/14	1100	WIPE	N/A	1, 20mlgl.							X						
E50	-2	6/5/14	1105	WIPE	N/A	1, 20mlgl							X						
F40	-3	6/5/14	1110	WIPE	N/A	1, 20mlgl							X						
F50	-4	6/5/14	1115	WIPE	N/A	1, 20mlgl							X						
G40	-5	6/5/14	1120	WIPE	N/A	1, 20mlgl							X						
G50	-6	6/5/14	1125	WIPE	N/A	1, 20mlgl							X						
TB (TRIPBLANK)	-7	6/5/14	1130	WIPE	N/A	1, 20mlgl.							X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
Jonathan Pastrana	AIS	6/5/14	520	[illegible]	ASC	6/5/14	5:20 pm
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, P=Plastic bottle, A=Air Bag, V=VOA vial, G=Glass bottle

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

06-16-2014

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 06-09-2014
Lab Job No.: A406020

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 06-09-2014 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AF10-PCBS1

Lab Job No.: A406020

Date Sampled: 06-09-2014
Date Received: 06-09-2014
Date Extracted: 06-09-2014
Date Analyzed: 06-10-2014
Date Reported: 06-16-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
D-40	A406020-1	1	ND	ND	ND	ND	ND	ND	ND
D-50	A406020-2	1	ND	ND	ND	ND	ND	ND	ND
D-60	A406020-3	1	ND	ND	ND	ND	ND	ND	ND
E-60	A406020-4	1	ND	ND	ND	ND	ND	ND	ND
F-60	A406020-5	1	ND	ND	ND	ND	ND	ND	ND
G-60	A406020-6	1	ND	ND	ND	ND	ND	ND	ND
H-30	A406020-7	1	ND	ND	ND	ND	ND	ND	ND
Cooling Tower-1	A406020-8	1	ND	ND	ND	ND	ND	ND	ND
Cooling Tower-2	A406020-9	1	ND	ND	ND	ND	0.815	ND	ND
Cooling Tower-1	A406020-10	1	ND	ND	ND	ND	ND	ND	ND
Row 65 Pipe-1	A406020-11	1	ND	ND	ND	ND	ND	ND	ND
Row 65 Pipe-2	A406020-12	1	ND	ND	ND	ND	ND	ND	ND
Row 69 Pipe-1	A406020-13	1	ND	ND	ND	ND	ND	ND	ND
Row 69 Pipe-2	A406020-14	1	ND	ND	ND	ND	ND	ND	ND
Row 69 Pipe-3	A406020-15	1	ND	ND	ND	ND	ND	ND	ND
Trip Blank	A406020-16	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank;
DF=Dilution Factor; ND=Not Detected (below DF × MDL).

06-16-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A406020
Project:	Pechiney/33210		
Matrix:	Solid	Lab Sample ID:	SS406010-1
Batch No.	AF06-PCBS1	Date Analyzed:	06-10-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.517	0.519	103.4	103.8	0.4	30	46-127
1260	ND	0.5	0.493	0.477	98.6	95.4	3.3	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.514	0.5	102.8	80-120
1260	0.466	0.5	93.2	80-120

ND:Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number A406020

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: PELAYO | Phone: 310-522-1168 | Fax: 310-522-0474 | Sampled by: PELAYO

Project Name/No.: PECHINEY 133210 | Project Site: 3200 FRUITLAND AVE. VERNON CA

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☒ Normal

Sample Condition: ☑ Chilled ☒ Intact ☐ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
D-40	A406020-1	6/9/14	1005	WIPE	N/A	1,20 mlgl							X						
D-50	-2		1010										X						
D-60	-3		1015										X						
E-60	-4		1020										X						
F-60	-5		1025										X						
G-60	-6		1030										X						
H-30	-7		1035										X						
Cooling Tower-1	-8		1040										X						
Cooling Tower-2	-9		1045										X						
Cooling Tower-3	-10		1050										X						
Row 65 Pipe-1	-11		1055										X						
Row 65 Pipe-2	-12		1100										X						
Row 69 Pipe-1	-13		1105										X						
Row 69 Pipe-2	-14		1110										X						
Row 69 Pipe-3	-15		1115										X						
TRIP BLANK	-16		1120										X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
Jonathan Pantoja	AIS	6/9/14	5:45	[signature]	ASC	6/9/14	5:45 pm
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

07-02-2014

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 06-26-2014
Lab Job No.: A406090

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 06-26-2014 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AF29-PCBS1

Lab Job No.: A406090

Date Sampled: 06-26-2014
Date Received: 06-26-2014
Date Extracted: 06-26-2014
Date Analyzed: 06-29-2014
Date Reported: 07-02-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
Boyle Pipe-1	A406090-1	1	ND	ND	ND	ND	ND	ND	ND
Boyle Pipe-2	A406090-2	1	ND	ND	ND	ND	ND	ND	ND
Boyle Pipe-3	A406090-3	20	ND	ND	ND	ND	99.2	ND	4.26
Boyle Pipe-4	A406090-4	1	ND	ND	ND	ND	ND	ND	ND
Boyle Pipe-5	A406090-5	50	ND	ND	ND	ND	363	ND	6.91
Boyle Pipe-6	A406090-6	1	ND	ND	ND	ND	6.41	ND	ND
Boyle Pipe-7	A406090-7	20	ND	ND	ND	ND	182	ND	6.34
Boyle Pipe-8	A406090-8	10	ND	ND	ND	ND	122	ND	3.18
Boyle Pipe-9	A406090-9	1	ND	ND	ND	ND	7.49	ND	ND
Boyle Pipe-10	A406090-10	1	ND	ND	ND	ND	1.72	ND	ND
Boyle Pipe-11	A406090-11	1	ND	ND	ND	ND	1.65	ND	ND
Boyle Pipe-12	A406090-12	1	ND	ND	ND	ND	ND	ND	ND
Boyle Pipe-13	A406090-13	1	ND	ND	ND	ND	ND	ND	ND
Boyle Pipe-14	A406090-14	1	ND	ND	ND	ND	ND	ND	ND
Cooling Tower-1	A406090-15	1	ND	ND	ND	ND	ND	ND	ND
Cooling Tower-2	A406090-16	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

Client: American Integrated Services
Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AF29-PCBS1/AF29-DS2

Lab Job No.: A406090

Date Sampled: 06-26-2014
Date Received: 06-26-2014
Date Extracted: 06-26-2014
Date Analyzed: 06-29/30-2014
Date Reported: 07-02-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
Parcel 6-1	A406090-17	1	ND	ND	ND	ND	ND	ND	ND
Parcel 6-2	A406090-18	1	ND	ND	ND	ND	ND	ND	ND
Parcel 6-3	A406090-19	1	ND	ND	ND	ND	ND	ND	ND
Parcel 6-4	A406090-20	1	ND	ND	ND	ND	ND	ND	ND
Parcel 6-5	A406090-21	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-1	A406090-22	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-2	A406090-23	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-3	A406090-24	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-4	A406090-25	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-5	A406090-26	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-6	A406090-27	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-7	A406090-28	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-8	A406090-29	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-9	A406090-30	1	ND	ND	ND	ND	ND	ND	ND
Rail Road Tracks-10	A406090-31	1	ND	ND	ND	ND	ND	ND	ND
Trip Blank	A406090-32	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

07-02-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A406090
Project:	Pechiney/33210		
Matrix:	Solid	Lab Sample ID:	SW406029-1
Batch No.	AF29-PCBS1	Date Analyzed:	06-29-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.536	0.542	107.2	108.4	1.1	30	46-127
1260	ND	0.5	0.497	0.488	99.4	97.6	1.8	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.512	0.5	102.4	80-120
1260	0.572	0.5	114.4	80-120

ND:Not Detected (at the specified limit).

07-02-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A406090
Project:	Pechiney/33210		
Matrix:	Solid	Lab Sample ID:	SW406029-2
Batch No.	AF29-PCBS2	Date Analyzed:	06-30-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.584	0.576	116.8	115.2	1.4	30	46-127
1260	ND	0.5	0.551	0.531	110.2	106.2	3.7	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.559	0.5	111.8	80-120
1260	0.505	0.5	101.0	80-120

ND:Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION
CHAIN OF CUSTODY RECORD

Lab Job Number A406090

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: C. Pelayo | Phone: 310-522-1168 | Fax: 310-522-0474 | Sampled by: Pelayo

Project Name/No.: Pelhiney / 33210 | Project Site: 3200 Fruitland Ave, Vernon CA 90058

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☒ Normal

Sample Condition: ☐ Chilled ☒ Intact ☐ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
Boyle Pipe - 1	A406090 -1	6/26	0800	WIPE		1, 20 mlgl							X						
-2	-2		0805			1, 20 mlgl							X						
-3	-3		0810										X						
-4	-4		0815										X						
-5	-5		0820										X						
-6	-6		0825										X						
-7	-7		0830										X						
-8	-8		0835										X						
-9	-9		0840										X						
-10	-10		0845										X						
-11	-11		0850										X						
-12	-12		0855										X						
-13	-13		0900										X						
-14	-14		0905										X						
Cooling Tower - 1	-15		0910										X						
Trip Blank	-32		0915										X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[illegible]	AIS	6/26	5:[illegible]	[illegible]	ASC	6/26/12	5:15 pm
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: A=Air Bag, G=Glass bottle, M=Metal Tube, P=Plastic bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

ALPHA SCIENTIFIC CORPORATION
CHAIN OF CUSTODY RECORD

Lab Job Number A406090

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: C. PELAYO | Phone: 310-522-1168 | Fax: 310-522-0474 | Sampled by: PELAYO

Project Name/No.: PELHINEY / 33210 | Project Site: 3200 FRUITLAND AVE, VERNON CA 90058

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☒ Normal

Sample Condition: ☐ Chilled ☒ Intact ☐ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
COOLING TOWER-2	A406090-16	6/26/14	1005	WIPE		1, 20mlgl							X						
PARCEL 6 - 1	-17		1010										X						
-2	-18		1015										X						
-3	-19		1020										X						
-4	-20		1025										X						
-5	-21		1030										X						
RAILROAD TRACKS -1	-22		1035										X						
-2	-23		1040										X						
-3	-24		1045										X						
-4	-25		1050										X						
-5	-26		1055										X						
-6	-27		1100										X						
-7	-28		1105										X						
-8	-29		1110										X						
-9	-30		1115										X						
-10	-31		1120										X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[signature]	AIS	6/26/14	5:15	[signature]	ASC	6/26/14	5:15p
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

07-16-2014

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 07-10-2014
Lab Job No.: A407025

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 07-10-2014 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AG11-PCBS1

Lab Job No.: A407025

Date Sampled: 07-10-2014
Date Received: 07-10-2014
Date Extracted: 07-10-2014
Date Analyzed: 07-11-2014
Date Reported: 07-16-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
Phase IV-1	A407025-1	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-2	A407025-2	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-3	A407025-3	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-4	A407025-4	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-5	A407025-5	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-6	A407025-6	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-7	A407025-7	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-8	A407025-8	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-9	A407025-9	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-10	A407025-10	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-11	A407025-11	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-12	A407025-12	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-13	A407025-13	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-14	A407025-14	1	ND	ND	ND	ND	ND	ND	ND
Phase IV-15	A407025-15	1	ND	ND	ND	ND	ND	ND	ND
Trip Blank	A407025-16	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank;
DF=Dilution Factor; ND=Not Detected (below DF × MDL).

Client: American Integrated Services
Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AG11-PCBS1/AG11-PCBS2

Lab Job No.: A407025

Date Sampled: 07-10-2014
Date Received: 07-10-2014
Date Extracted: 07-10-2014
Date Analyzed: 07-11/12-2014
Date Reported: 07-16-2014

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
Phase V-1	A407025-17	1	ND	ND	ND	ND	ND	ND	ND
Phase V-2	A407025-18	1	ND	ND	ND	ND	ND	ND	ND
Phase V-3	A407025-19	1	ND	ND	ND	ND	ND	ND	ND
Phase V-4	A407025-20	1	ND	ND	ND	ND	ND	ND	ND
Phase V-5	A407025-21	1	ND	ND	ND	ND	ND	ND	ND
FDC1-1	A407025-22	1	ND	ND	ND	ND	ND	ND	ND
FDC1-2	A407025-23	1	ND	ND	ND	ND	ND	ND	ND
FDC4-1	A407025-24	1	ND	ND	ND	ND	ND	ND	ND
FDC4-2	A407025-25	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

07-16-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A407025
Project:	Pechiney/33210		
Matrix:	Solid	Lab Sample ID:	SW407011-1
Batch No.	AG11-PCBS1	Date Analyzed:	07-11-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.577	0.582	115.4	116.4	0.9	30	46-127
1260	ND	0.5	0.516	0.519	103.2	103.8	0.6	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.560	0.5	112.0	80-120
1260	0.492	0.5	98.4	80-120

ND:Not Detected (at the specified limit).

07-16-2014

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A407025
Project:	Pechiney/33210		
Matrix:	Solid	Lab Sample ID:	SW407011-2
Batch No.	AG11-PCBS2	Date Analyzed:	07-12-2014

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.574	0.582	114.8	116.4	1.4	30	46-127
1260	ND	0.5	0.536	0.542	107.2	108.4	1.1	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.595	0.5	119.0	80-120
1260	0.577	0.5	115.4	80-120

ND:Not Detected (at the specified limit).

ALPHA SCIENTIFIC COR RATION

CHAIN OF CUSTODY RECORD

Lab Job Number A407025

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: C. PELAYO | Phone: 310-522-1168 | Fax: 310-522-0474 | Sampled by: PELAYO

Project Name/No.: PECHINEY / 33210 | Project Site: 3200 FRUITLAND AVE, VERNON CA 90058

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☒ Normal

Sample Condition: ☐ Chilled ☒ Intact ☐ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)					Remark
PHASE III - 1	A407025-1	7/10/14	900	WIPE		1, 20mlg							X					
-2	-2	"	905										X					
-3	-3		910										X					
-4	-4		915										X					
-5	-5		920										X					
-6	-6		925										X					
-7	-7		930										X					
-8	-8		935										X					
-9	-9		940										X					
-10	-10		945										X					
-11	-11		950										X					
-12	-12		955										X					
-13	-13		1000										X					
-14	-14		1005										X					
-15	-15		1010										X					
FIELD BLANK	-16		1015										X					

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
Jonathan Pastrana	AIS	7/10	500	[illegible]	ASC	7/10/14	5:00pm
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: A=Air Bag, G=Glass bottle, M=Metal Tube, P=Plastic bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number A407025

Client:	American Integrated Services, Inc.
Address	1502 E. Opp St., Wilmington, CA 90744
Report Attention	C. PELAYO
Phone	310-522-1168
Fax	310-522-0474
Sampled by	PELAYO
Project Name/No.	PECHINEY / 33210
Project Site	3300 FRUITLAND AVE, VERNON CA 90058

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☒ Normal

Sample Condition: ☐ Chilled ☒ Intact ☐ Sample seals

Analyses Requested

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
PHASE II - 1	A407025-17	7/10/14	1100	WIPE		1, 20mL gl							X						
-2	-18		1105										X						
-3	-19		1110										X						
-4	-20		1115										X						
-5	-21		1120										X						
FDC 1 - 1	-22		1125										X						
-2	-23		1130										X						
FDC 4 - 1	-24		1135										X						
-2	-25		1140										X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[signature]	AIS	7/10	500	[signature]	RSC	7/10/14	5:00p
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, P=Plastic bottle, A=Air Bag, V=VOA vial, G=Glass bottle

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

09-06-2013

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: 33210
Project Site: Pechiney Cast Plate/3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 09-06-2013
Lab Job No.: A309014

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 09-06-2013 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: 33210
Project Site: Pechiney Cast Plate/3200 Fruitland Ave., Vernon, CA 90058

Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AI06-PCBS1

Lab Job No.: A309014
Date Sampled: 09-06-2013
Date Received: 09-06-2013
Date Extracted: 09-06-2013
Date Analyzed: 09-06-2013
Date Reported: 09-06-2013

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
Wipe Sample "A"	A309014-1	1	ND	ND	ND	ND	ND	ND	ND
Trip Blank "B"	A309014-2	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

09-06-2013

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A309014
Project:	33210		
Matrix:	Solid	Lab Sample ID:	SS309006-1
Batch No.	AI06-PCBS1	Date Analyzed:	09-06-2013

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.566	0.544	113.2	108.8	4.0	30	46-127
1260	ND	0.5	0.542	0.514	108.4	102.8	5.3	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.417	0.5	83.4	80-120
1260	0.513	0.5	102.6	80-120

ND: Not Detected (at the specified limit).

SERVICE REQUESTED:
- [x] EMERGENCY ONE (1) DAY
- [ ] RUSH - TWO (2) DAY
- [ ] RUSH - THREE (3) DAY
- [ ] STANDARD

DATE RESULTS NEEDED: 09/06/13

ALL RESULTS WILL BE MAILED
- [ ] PLEASE FAX RESULTS
- [x] PLEASE PHONE RESULTS

PAGE 1 OF 1

DEXSIL®

1 HAMDEN PARK DRIVE
HAMDEN, CONNECTICUT 06517
203-288-3509

A309014

CHAIN OF CUSTODY ANALYSIS REQUEST

JOB NUMBER 33210

DATS NUMBER

REQUESTOR'S NAME, ADDRESS, TELEPHONE NO. AND FAX NO.
AMERICAN INTEGRATED SERVICES
1502 E OPP ST
WILMINGTON, CA 90744
(310)522-1168

SAMPLING SITE ADDRESS
PECHINEY CAST PLATE
3200 FRUITLAND AVE
VERNON, CA 90058

SAMPLED BY (SIGNATURE): CARLOS PELAYO

PURCHASE ORDER NO. 33210

NO. OF SAMPLES IN SHIPMENT 2

INDICATE ANALYSIS REQUESTED

OTHERS

	SAMPLE ID	GRAB	COMP	MATRIX: SOIL	OIL	SLUDGE	WATER	PRESERVATION METHOD	SAMPLING DATE	SAMPLING TIME	PCB	Total Halogens	Metals -	DEXSIL ID NUMBER
1	WIPE SAMPLE "A"						✓	ICE	09/06/13	9:05AM	✓			A309014-1
2	TRIP BLANK "B"						✓	S	09/06/13	9:10AM	✓			-2
3														
4														
5														
6														
7														
8														
9														
10														

RELEASED BY (SIGNATURE)	DATE / TIME RELEASED	DELIVERY METHOD	RECEIVED BY (PRINT AND SIGN)	DATE / TIME RECEIVED	CONDITION NOTED
[signature]	09/06/13 11:00AM	DROP OFF	Meilin [illegible]	9-6-13 11:00am	Good.

COMMENTS:

TO DEXSIL - MASTER FILE

Alpha Scientific Corporation
Environmental Laboratories

09-09-2013

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: 33210
Project Site: Pechiney Cast Plate/3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 09-09-2013
Lab Job No.: A309025

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 09-09-2013 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: 33210
Project Site: Pechiney Cast Plate/3200 Fruitland Ave., Vernon, CA 90058

Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AI09-PCBS1

Lab Job No.: A309025

Date Sampled: 09-09-2013
Date Received: 09-09-2013
Date Extracted: 09-09-2013
Date Analyzed: 09-09-2013
Date Reported: 09-09-2013

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
Wipe Sample "A"	A309025-1	1	ND	ND	ND	ND	ND	ND	ND
Trip Blank "B"	A309025-2	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

09-09-2013

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A309025
Project:	33210		
Matrix:	Solid	Lab Sample ID:	SW309009-1
Batch No.	AI09-PCBS1	Date Analyzed:	09-09-2013

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.559	0.576	111.8	115.2	3.0	30	46-127
1260	ND	0.5	0.557	0.553	111.4	110.6	0.7	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.508	0.5	101.6	80-120
1260	0.511	0.5	102.2	80-120

ND: Not Detected (at the specified limit).

SERVICE REQUIRED:
- [x] EMERGENCY - ONE (1) DAY
- [ ] RUSH - TWO (2) DAY
- [ ] RUSH - THREE (3) DAY
- [ ] STANDARD

DATE RESULTS NEEDED: 9/9/13

ALL RESULTS WILL BE MAILED
- [ ] PLEASE FAX RESULTS
- [x] PLEASE PHONE RESULTS

PAGE 1 OF 1

DEXSIL®

1 HAMDEN PARK DRIVE
HAMDEN, CONNECTICUT 06517
203-288-3509

A309025

CHAIN OF CUSTODY ANALYSIS REQUEST

JOB NUMBER 33210

DATE NUMBER

REQUESTOR'S NAME, ADDRESS, TELEPHONE NO. AND FAX NO.
AMERICAN INTEGRATED SERVICES
1502 E OPP ST
WILMINGTON CA 90744
(310) 522-1168

SAMPLING SITE ADDRESS
PECHINEY CAST PLATE
3200 FRUITLAND AVE
VERNON CA 90058

SAMPLED BY (SIGNATURE)

PURCHASE ORDER NO. 33210

NO. OF SAMPLES IN SHIPMENT 2

INDICATE ANALYSIS REQUESTED

	SAMPLE ID	Lab ID	GRAB	COMP	MATRIX: WATER	SOIL	OIL	SLUDGE	WIPE	PRESERVATION METHOD	SAMPLING DATE	SAMPLING TIME	NUMBER OF CONTAINERS	PCB	Total Halogens	Metals -	OTHERS	DEXSIL ID NUMBER
1	WIPE SAMPLE "A"	A309025-1							✓	ICE	9/9/13	1145		✓				
2	TRIP BLANK "B"	-2							✓	ICE	9/9/13	1145		✓				
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

RELEASED BY (SIGNATURE)	DATE / TIME RELEASED	DELIVERY METHOD
	9/9/13 3:15PM	DROPOFF

COMMENTS:

TO DEXSIL - MASTER FILE

Alpha Scientific Corporation
Environmental Laboratories

09-12-2013

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: 33210
Project Site: Pechiney Cast Plate/3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 09-11-2013
Lab Job No.: A309040

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 09-12-2013 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: 33210
Project Site: Pechiney Cast Plate/3200 Fruitland Ave., Vernon, CA 90058

Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AI12-PCBS1

Lab Job No.: A309040

Date Sampled: 09-11-2013
Date Received: 09-12-2013
Date Extracted: 09-12-2013
Date Analyzed: 09-12-2013
Date Reported: 09-12-2013

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
Wipe Sample "A"	A309040-1	1	ND	ND	ND	ND	2.5	ND	ND
Wipe Sample "B"	A309040-2	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

09-12-2013

EPA 8082
Batch QA/QC Report

Client: American Integrated Services
Project: 33210
Matrix: Solid
Batch No. AI12-PCBS1

Lab Job No: A309040
Lab Sample ID: SS309012-1
Date Analyzed: 09-12-2013

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.584	0.610	116.8	122.0	4.4	30	46-127
1260	ND	0.5	0.566	0.572	113.2	114.4	1.1	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.579	0.5	115.8	80-120
1260	0.547	0.5	109.4	80-120

ND: Not Detected (at the specified limit).

SERVICE REQUIRED:
- [x] EMERGENCY ONE (1) DAY
- [ ] RUSH - TWO (2) DAY
- [ ] RUSH - THREE (3) DAY
- [ ] STANDARD

DATE RESULTS NEEDED: 9/12/13

ALL RESULTS WILL BE MAILED
- [ ] PLEASE FAX RESULTS
- [x] PLEASE PHONE RESULTS

PAGE 1 OF 1

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203-288-3509

A309040

CHAIN OF CUSTODY ANALYSIS REQUEST

JOB NUMBER 33210

DATE NUMBER

REQUESTOR'S NAME, ADDRESS, TELEPHONE NO. AND FAX NO.
American Integrated Services
1502 E Opp St
Wilmington, CA 90744
(310) 522-1168

SAMPLING SITE ADDRESS
Pechiney Cast Plate
3200 Fruitland Ave
Vernon, CA 90058

SAMPLED BY (SIGNATURE) Isaac Herrera

PURCHASE ORDER NO. 33210

NO. OF SAMPLES IN SHIPMENT 2

INDICATE ANALYSIS REQUESTED

	SAMPLE ID	GRAB	COMP	MATRIX: WATER	SOIL	OIL	SLUDGE	Wipe	PRESERVATION METHOD	SAMPLING DATE	SAMPLING TIME	NUMBER OF CONTAINERS	PCB	Total Halogens	Metals -	OTHERS	DEXSIL ID NUMBER
1	Wipe Sample "A" A309040-1							✓		09/11/13	1:00 PM		✓				
2	Wipe Sample "B" -2							✓		09/11/13	1:00 PM		✓				
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

RELEASED BY (SIGNATURE)	DATE / TIME RELEASED	DELIVERY METHOD	RECEIVED BY (SIGNATURE)	DATE / TIME RECEIVED	RECEIVED BY (SIGNATURE)
	09/11/2013	drop off			

COMMENTS:

TO DEXSIL - MASTER FILE

Alpha Scientific Corporation
Environmental Laboratories

09-23-2013

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: 33210
Project Site: Pechiney Cast Plate/3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 09-22/23-2013
Lab Job No.: A309075

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 09-23-2013 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: 33210
Project Site: Pechiney Cast Plate/3200 Fruitland Ave., Vernon, CA 90058

Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AI23-PCBS1

Lab Job No.: A309075

Date Sampled: 09-22/23-2013
Date Received: 09-23-2013
Date Extracted: 09-23-2013
Date Analyzed: 09-23-2013
Date Reported: 09-23-2013

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
"A" (Area B)	A309075-1	1	ND	ND	ND	ND	ND	ND	ND
"B" (Area C)	A309075-2	1	ND	ND	ND	27.2	ND	ND	ND
"C" (Pipe Sample)	A309075-3	1	ND	ND	ND	3.4	ND	ND	ND
"D" (Trip)	A309075-4	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

09-23-2013

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A309075
Project:	33210		
Matrix:	Solid	Lab Sample ID:	SW309023-1
Batch No.	AI23-PCBS1	Date Analyzed:	09-23-2013

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.591	0.583	118.2	116.6	1.4	30	46-127
1260	ND	0.5	0.583	0.550	116.6	110.0	5.8	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.545	0.5	109.0	80-120
1260	0.520	0.5	104.0	80-120

ND: Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number A309075

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: PELAYO | Phone: 310-522-1168 | Fax: 310-522-0474 | Sampled by: PELAYO

Project Name/No.: 33210 | Project Site: 3200 FRUITLAND AVE VERNON CA

T.A.T. Requested: ☑ Rush 8 12 24 hrs ☐ 2-3 days ☐ Normal

Sample Condition: ☑ Chilled ☒ Intact ☐ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
"A" (AREA B)	A309075-1	9/22/13	0900	WIPE		1 glass							✓						
"B" (AREA C)	-2	9/22/13	0915	WIPE		1 glass							✓						
"C" (PIPE SAMPLE)	-3	9/22/13	0920	WIPE		1 glass							✓						
"D" (TRIP)	-4	9/22/13	0923	WIPE		1 glass							✓						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
Jonathan Pastrana	AIS	9/23/13	11 Am	[illegible]	ASC	9/23/13	11:00 AM
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

10-21-2013

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 10-17-2013
Lab Job No.: A310044

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 10-17-2013 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AJ18-PCBS1

Lab Job No.: A310044

Date Sampled: 10-17-2013
Date Received: 10-17-2013
Date Extracted: 10-18-2013
Date Analyzed: 10-18-2013
Date Reported: 10-21-2013

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
A-FDC	A310044-1	1	ND	ND	ND	ND	ND	ND	ND
B-FDC	A310044-2	1	ND	ND	ND	ND	ND	ND	ND
C-Trip	A310044-3	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

10-21-2013

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A310044
Project:	Pechiney/33210		
Matrix:	Soil	Lab Sample ID:	SS310018-1
Batch No.	AJ18-PCBS1	Date Analyzed:	10-18-2013

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.521	0.540	104.2	108.0	3.6	30	46-127
1260	ND	0.5	0.452	0.470	90.4	94.0	3.9	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.480	0.5	96.0	80-120
1260	0.511	0.5	102.2	80-120

ND: Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number A310044

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: PELAYO | Phone: 310-522-1168 | Fax: 310-522-0474 | Sampled by: PELAYO

Project Name/No.: PECHINEY/33210 | Project Site: 3200 FRUITLAND AVE VERNON CA

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☑ Normal

Sample Condition: ☐ Chilled ☑ Intact ☑ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
A - FDC	A310044-1	10/17/13	345pm	SOIL	N/A	1 GLASS							✓						
B - FDC	-2	10/17/13	350pm	SOIL	N/A	1 GLASS							✓						
C - TRIP	-3	10/17/13	352pm	SOIL	N/A	1 GLASS							✓						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
Jonathan Pastorana	AIS	10/17/13	17:45	Meilingli	ASC	10-17-13	17:45
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Alpha Scientific Corporation
Environmental Laboratories

12-04-2013

Mr. Carlos Pelayo
American Integrated Services
1502 E. Opp Street
Wilmington, CA 90744

Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Sample Date: 12-02-2013
Lab Job No.: A312006

Dear Mr. Pelayo:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 12-02-2013 and analyzed by the following EPA methods:

EPA 8082 (PCBs)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: American Integrated Services
Project: Pechiney/33210
Project Site: 3200 Fruitland Ave., Vernon, CA 90058
Matrix: Wipe sample
Extraction Method: EPA 3550B
Batch No. AL02-PCBS1

Lab Job No.: A312006

Date Sampled: 12-02-2013
Date Received: 12-02-2013
Date Extracted: 12-02-2013
Date Analyzed: 12-02/03-2013
Date Reported: 12-04-2013

EPA 8082 (PCB's)
Reporting Units: µg/100 cm^2

Sample ID	Lab ID	DF	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
Method Detect. Limit (MDL)			0.1	0.2	0.1	0.1	0.1	0.1	0.1
Method Blank		1	ND	ND	ND	ND	ND	ND	ND
H-5	A312006-1	1	ND	ND	ND	ND	ND	ND	ND
H-15	A312006-2	1	ND	ND	ND	ND	ND	ND	ND
D-5	A312006-3	1	ND	ND	ND	ND	ND	ND	ND
D-15	A312006-4	1	ND	ND	ND	ND	ND	ND	ND
E-5	A312006-5	1	ND	ND	ND	ND	ND	ND	ND
E-15	A312006-6	1	ND	ND	ND	ND	ND	ND	ND
F-5	A312006-7	1	ND	ND	ND	ND	ND	ND	ND
F-15	A312006-8	1	ND	ND	ND	ND	ND	ND	ND
A-1	A312006-9	1	ND	ND	ND	ND	ND	ND	ND
A-2	A312006-10	1	ND	ND	ND	ND	ND	ND	ND
A-3	A312006-11	1	ND	ND	ND	ND	ND	ND	ND
C-1	A312006-12	1	ND	ND	ND	ND	ND	ND	ND
P-1	A312006-13	1	ND	ND	ND	ND	ND	ND	ND
SP-1	A312006-14	1	ND	ND	ND	ND	ND	ND	ND
SP-2	A312006-15	1	ND	ND	ND	ND	ND	ND	ND
Trip Blank	A312006-16	1	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit;
DF=Dilution Factor;
MB=Method Blank;
ND=Not Detected (below DF × MDL).

12-04-2013

EPA 8082
Batch QA/QC Report

Client:	American Integrated Services	Lab Job No:	A312006
Project:	Pechiney/33210		
Matrix:	Soil	Lab Sample ID:	SW312002-1
Batch No.	AL02-PCBS1	Date Analyzed:	12-03-2013

I. MS/MSD Report
Unit: ppm

Analyte	Method Blank	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1016	ND	0.5	0.578	0.574	115.6	114.8	0.7	30	46-127
1260	ND	0.5	0.479	0.478	95.8	95.6	0.2	30	31-134

II. LCS Result
Unit: ppm

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1016	0.561	0.5	112.2	80-120
1260	0.507	0.5	101.4	80-120

ND: Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number A312006

Client: American Integrated Services, Inc.

Address: 1502 E. Opp St., Wilmington, CA 90744

Report Attention: PELAYO | Phone: 310-522-1168 | Fax: 310-522-0474 | Sampled by: PELAYO

Project Name/No.: PECHINEY/33220 | Project Site: 3200 FERNLAND AVE VERNON CA

T.A.T. Requested: ☐ Rush 8 12 24 hrs ☐ 2-3 days ☑ Normal

Sample Condition: ☐ Chilled ☑ Intact ☐ Sample seals

Analyses Requested

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserv	No.,type* & size of container	8015M (Gasoline)	8015M(Diesel)	8260B(BTEX, Oxygenates)	8260B (VOCs)	8270C(SVOCs)	CAM Metals	8082 (PCBs)						Remark
H-5	A312006-1	12/2/13	245PM	WIPE	N/A	1, 20mlgl.							X						
H-15	-2	12/2/13	250PM	WIPE	N/A	1, 20mlgl.							X						
D-5	-3	12/2/13	255PM	WIPE	N/A	1, 20mlgl							X						
D-15	-4	12/2/13	300PM	WIPE	N/A	1, 20mlgl.							X						
E-5	-5	12/2/13	305PM	WIPE	N/A	1, 20mlgl							X						
E-15	-6	12/2/13	310PM	WIPE	N/A	1, 20mlgl							X						
F-5	-7	12/2/13	315PM	WIPE	N/A	1, 20mlgl							X						
F-15	-8	12/2/13	320PM	WIPE	N/A	1, 20mlgl							X						
A-1	-9	12/2/13	325PM	WIPE	N/A	1, 20mlgl							X						
A-2	-10	12/2/13	330PM	WIPE	N/A	1, 20mlgl							X						
A-3	-11	12/2/13	335PM	WIPE	N/A	1, 20mlgl							X						
C-1	-12	12/2/13	340PM	WIPE	N/A	1, 20mlgl							X						
P-1	-13	12/2/13	345PM	WIPE	N/A	1, 20mlgl							X						
SP-1	-14	12/2/13	350PM	WIPE	N/A	1, 20mlgl							X						
SP-2	-15	12/2/13	355PM	WIPE	N/A	1, 20mlgl							X						
TRIP BLANK	-16	12/2/13	400PM	WIPE	N/A	1, 20mlgl							X						

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[signature]	AIS	12/2/13	5:15pm	[signature]	ASC	12/2/13	5:15 PM
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

APPENDIX E

NORM Report

6397 Nancy Ridge Drive
San Diego, CA. 92121

Phone: 858-558-6736
Fax: 858-558-6756

Occupational Services, Inc.

Report ID Number: AIS-OSI-2013-10-21, Rev 0

Title: Unknown Isotopic Identification and Quantification
American Integrated Services
1502 E. Opp Street
Willmington, CA 90744-3927

Date Prepared: October 23, 2013

Prepared By:

Linda Bray

_____

Linda Bray, Senior Health Physicist, CHP

Nicola Rinaldi

_____

Nicola Rinaldi, Senior Health Physicist

Occupational Services, Inc. (OSI)
6397 Nancy Ridge Drive
San Diego, CA 92121
619-252-2211

Reviewed By:

_____

David Herrera

Purpose:

OSI performed on-site isotopic analysis, and direct surveys on three selected sample bricks located at 3200 Fruitland Avenue (corner of Boyle and Fruitland) in Vernon, California. The material and items were identified as potentially radioactive by American Integrated Services based on the appearance of the bricks and prior experience at the site. The onsite analysis work was performed on October 21, 2013 and was followed up by laboratory analysis at Occupational Services Inc. (OSI) facility at 6397 Nancy Ridge Dr., San Diego CA. OSI weighed, photographed, inspected, sampled, analyzed and surveyed the material to validate the assessments.

The purpose of the analysis was to identify the type of radioactive materials present, determine if the material is considered naturally occurring (pipe scale, rocks, etc.), technically enhanced or byproduct material, and estimate the quantity of radioactive material present for disposal purposes.

Scope:

The scope of the analysis involved materials contained in 3 separate sample bricks identified by American Integrated Services and provided to OSI for evaluation. This project was limited to identification of radioactive material, and estimation of gross quantity. No specific recommendations or preparation for disposal was included. However, information on regulatory licensing status, and potential options for disposal are provided for selected items where appropriate.

Background

Refractory brick can withstand extremely high temperatures and is used to build steel and glass furnaces. The brick is made by fusing zircon sand with alumina and sodium carbonate. The minerals used to make the bricks contain low levels of naturally occurring uranium and thorium. Typical activities in the minerals used to make the bricks range from 4 to 10 Bq/g Uranium products and 0.2 to 10 Bq/g Thorium products. The finished bricks can be expected to contain similar levels of radioactive materials.

The site where the bricks were located previously contained furnaces used to recycle aluminum, and earlier excavations of the furnaces indicated low levels of radioactive material in the bricks. American Integrated Services identified similar bricks during a recent excavation and requested OSI to analyze the material and confirm if the bricks contained radioactive material.

Methodology and Assumptions:

OSI used the following instruments to make onsite assessments of the material.

- S.E. International URSA-II Universal Radiation Spectrum Analyzer (Multichannel Analyzer - MCA) s/n 200177 and an Alpha Spectra, Inc. 2" Flat Sodium Iodide Scintillation Detector s/n 062310AH were used to make the radionuclide identification. The MCA was calibrated with NIST-traceable Ra-226 source and energy tested with additional reference sources of Cs-137 and Co-60.

- Ludlum Model 3, S/N 122603 with NaI detector Ludlum Model 44-10, S/N 91825 for localization of radioactivity

- RadEye PRD, S/N 30401 for low level dose rate measurements.

- Fluke Model 451B, S/N 6037 for exposure rate measurements.

Three bricks were selected at random from the pile of bricks at the excavation site. The bricks were intact and of similar shape and size. Count rate surveys were performed on contact with each brick with the Model 3 and the NaI detector to assess general activity levels. A dose rate survey was also performed on contact with each brick. Samples of the brick were taken back to OSI's facility for an MCA analysis to determine the gamma emitting isotopic composition. Comparison of the assessed isotopic composition and activity levels relative to expected quantities based on historical information was also performed. The activity in the sample was estimated from the weight of the sample, historical information regarding maximum percent concentration of radioactive material and the count rate and MCA surveys.

Results:

The background count rate on the Model 3 with the NaI detector was approximately 3,000 cpm. The count rate on each of the three bricks was approximately 6,000 cpm. The background dose rate on the RadEye PRD was approximately 5 uR/hr. The dose rate on each of the three bricks was approximately 8 uR/hr. Both survey methods indicated low levels of radioactive material were present in the bricks. Results of the evaluation are included in Table 1 below.

Table 1

Sample Number	Description	Isotope	Activity uCi	Weight of Material & Container grams	NORM	Photo & Description
1	Solid brick. One of three bricks selected for testing. All three bricks surveyed individually with Model 3 & NaI detector showed ≈ 3,000 cpm on surface above background .	Uranium & Thorium Daughter products MCA.	<2.5 uCi	4,557 g per brick	Yes	
2	Crushed brick from sample above. Surveyed with Model 3 & NaI detector showed approximately <1,000 cpm above background.	Uranium & Thorium Daughter products MCA.	<0.2 uCi	296.9 g	Yes	

Conclusion and Discussion: The bricks contain low levels of natural uranium and thorium daughter products. The total activity per brick is estimated at less than 2.5 uCi.

References

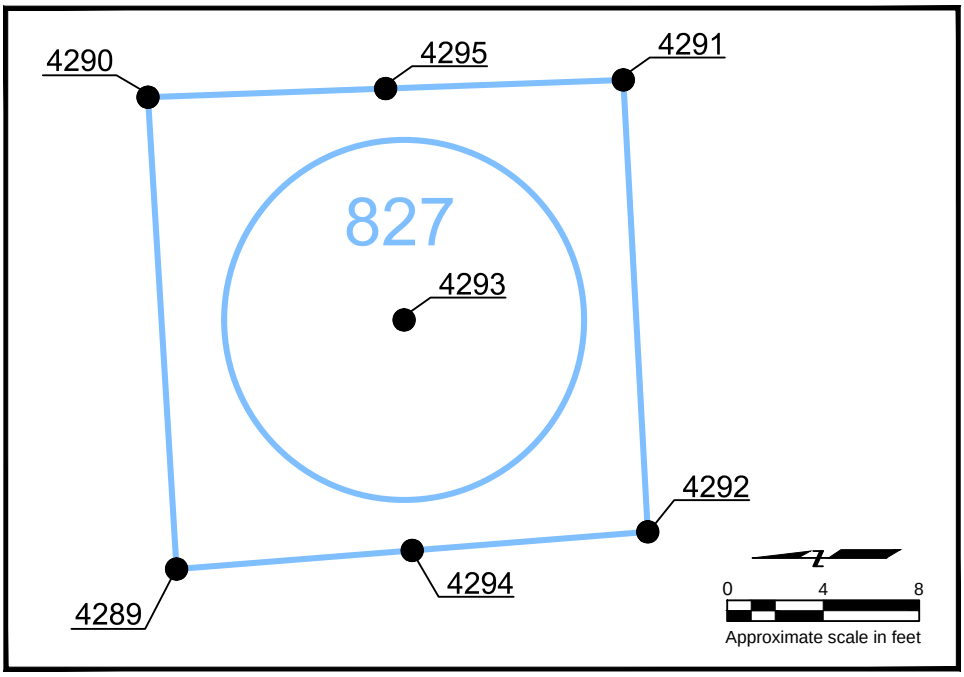
1. NUREG 1717 Systematic Radiological Assessment of Exemptions for Source and Byproduct Materials

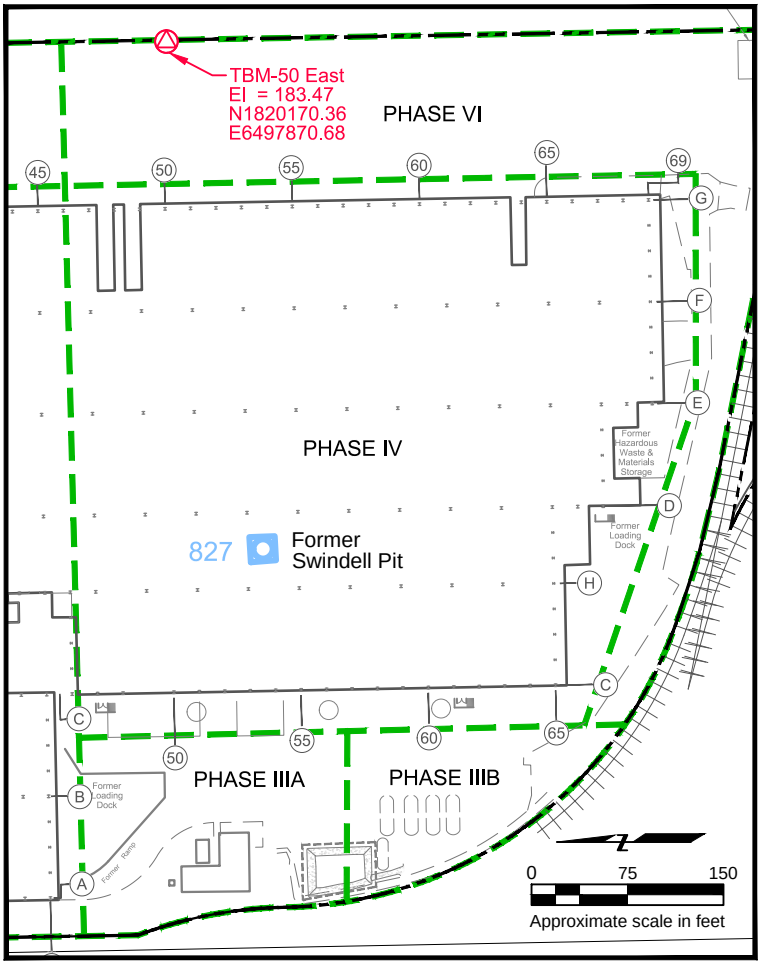
2. Tsurikov, N., Hinrichsen, P., Omar, M., Horst, R., Regulation of Natural Radioactiveity in Internaltional Transport and Trade, Radium Historical Items Catalog Final Report August 2008, M. A. Buchholz, M. Cervera.

3. Cooper, M. , Naturally Occurring Radioactive Materials (NORM in Australian Industries – Review of Current Inventories and Future Generation, Report to Radiation Health and Safety Advisory Council, ERS-006, September 2005.

APPENDIX F

In Place Structure Information





BENCHMARK:

VERTICAL DATUM NAVD88

COUNTY OF LOS ANGELES BM #Y10598, 2" DISC IN WALK 4.6' N/O CF, 14.8' W/O BCR
AT NE COR SLAUSON AVE AND BOYLE AVE (TO THE N) MKD (CITY OF VERNON MON)

2005 ELEV= 168.611 FEET NAVD88

HORIZONTAL DATUM NAD83, ZONE 5

NGS PID STATIONS AJ1840 AND AJ1885 EPOCH DATE 2000.35

Note: Compared to elevation to street FS elev. at TBM-50 East: Elev = 183.47'±

Structure 827 - Survey Data
Pechiney - Phase VI Area

Label	Easting	Northing	Elevation
4289	6497463.9265	1820104.3929	169.34
4290	6497483.5835	1820105.5848	169.51
4291	6497484.3047	1820085.7779	169.40
4292	6497465.4764	1820084.7589	169.48
4293	6497474.3046	1820094.9127	168.40
4294	6497464.7014	1820094.5759	169.53
4295	6497483.9441	1820095.6813	169.62

APPENDIX G

Compaction Test Results

NorCal Engineering

Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

September 23, 2014

Project Number 17007-13

American Integrated Services
P.O. Box 92316
Long Beach, California 90809

Attn: David Herrera

Re: **Observation and Testing of Excavation Backfill Operations** (Phase IIIA) – Located at 3200 Fruitland Avenue, in the City of Vernon, California

Dear Mr. Herrera:

Pursuant to your request, this firm has observed and tested the excavation backfill operations for the above referenced project. The excavation areas as shown in our report dated September 15, 2014 have been backfilled to the approval of this firm and in conformance with the below grade demolition plan requirements. We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

REGISTERED PROFESSIONAL ENGINEER
KEITH D. TUCKER
No. 841
Exp. 12/31/14
GEOTECHNICAL
STATE OF CALIFORNIA

Keith D. Tucker
Project Engineer
R.G.E. 841

Walter K. Mott
Project Manager

NorCal Engineering

Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

September 15, 2014 Project Number 17007-13

American Integrated Services
P.O. Box 92316
Long Beach, California 90809

Attn: David Herrera

Re: **Report of Geotechnical Observation and Testing of Excavation Backfill Operations** (Phase IIIA) – Located at 3200 Fruitland Avenue, in the City of Vernon, California

Dear Mr. Herrera:

Pursuant to your request, this firm has provided this geotechnical report to summarize the observation and testing performed by this firm for the excavation backfill operations at the above referenced project. Our geotechnical services pertaining to the backfill are summarized in the subsequent sections of this report. The report contains test results for Phase IIIA backfill operations, only. Backfill operations were performed concurrently at other locations on the site. Compaction test numbers in this report consist of Nos. 669-681 for this phase only.

Backfill Operations

The fill area consists of an excavation approximately 80 feet by 130 feet with a maximum depth of 15 feet. The excavation area was cleansed of all demolition debris and low density soils to expose competent native soils. The excavation bottom was observed and approved by this firm prior to placement of fill. Fill material placed was compacted to a minimum of 90% of the laboratory standard in lifts not in excess of eight inches in thickness. An excavator mounted sheepsfoot wheel was utilized for compaction control. A water truck provided moisture control. The excavation areas as shown in this report were backfilled to the approval of this firm and in conformance with the below grade demolition plan requirements.

Laboratory/Field Testing

The relative compaction was determined by Sand Cone Method (ASTM: D1556-07). The maximum density of the fill soils was obtained by the laboratory standard (ASTM: D1557-07) and results are shown on Table I. Tests were performed a minimum of every 500 cubic yards placed and every two feet in depth of fill placed. A summary of the compaction tests are included with locations shown on the accompanying plan.

No chemical analysis of soils was performed by this firm and is not within the scope of our services.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

Keith D. Tucker
Project Engineer
R.G.E. 841

REGISTERED PROFESSIONAL ENGINEER
KEITH D. TUCKER
No. 841
Exp. 12/31/14
GEOTECHNICAL
STATE OF CALIFORNIA

Walter K. Mott
Project Manager

APPENDICES

(In order of appearance)

Appendix A – Laboratory Tests

Table I – Maximum Density Tests

Appendix B – Summary of Compaction Tests

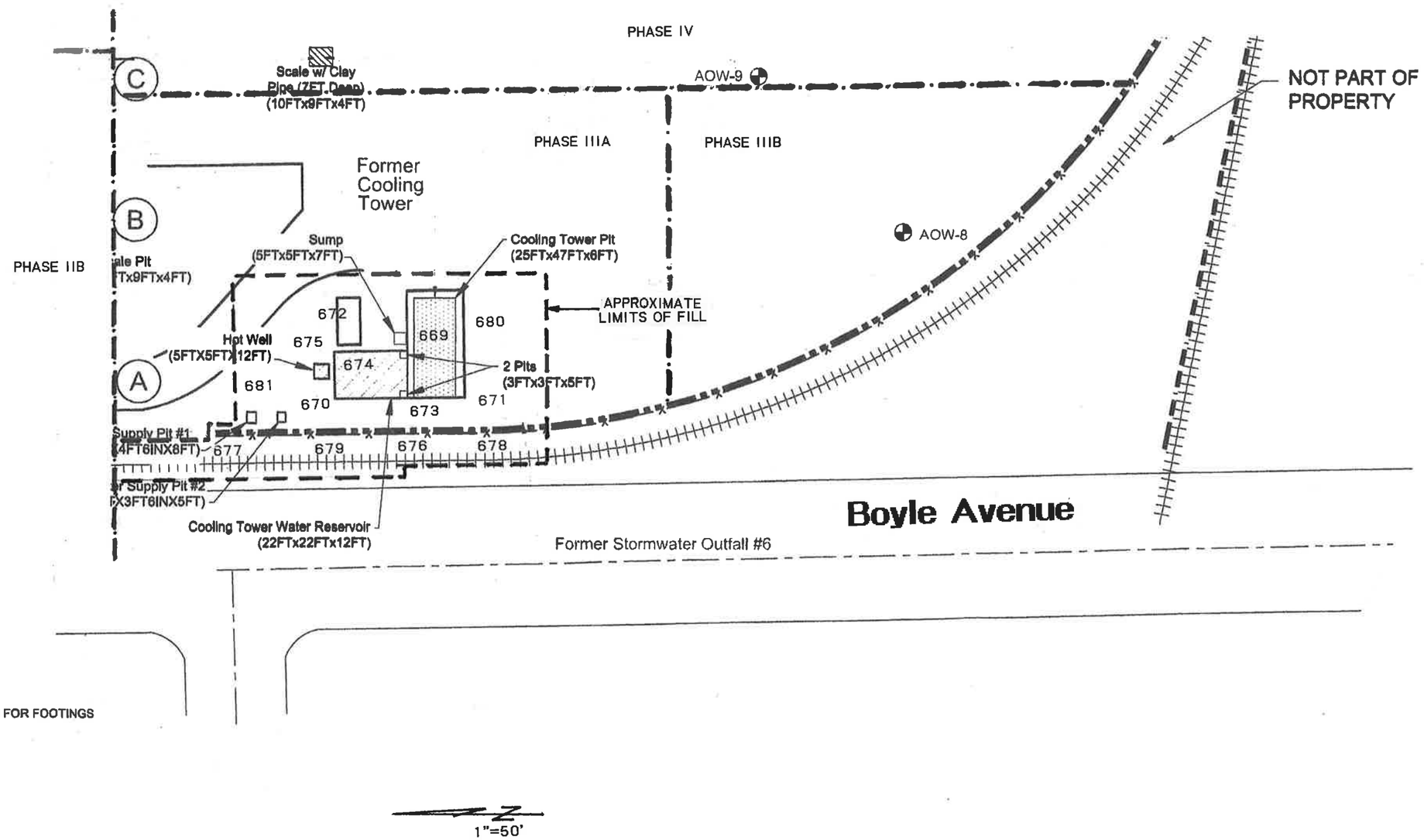
Site Plan
Summary of Compaction Tests

Appendix A

TABLE I
MAXIMUM DENSITY TESTS
(ASTM: D1557-07)

Sample	Classification	Optimum Moisture	Maximum Dry Density (lbs./cu.ft.)
I	Sandy SILT	11.0	131.0
II	Clayey SAND	12.5	123.0
III	Sandy SILT	10.0	140.5
IV	Silty SAND	11.0	110.5
V	Sandy SILT	11.5	119.0

Appendix B



EXPLANATION

- AOW-9 GROUNDWATER MONITORING WELL
- 20 - G COLUMN AND ROW NUMBERING SYSTEM FOR FOOTINGS
- LIMITS OF WORK
- PARCEL BOUNDARY
- RAILROAD TRACK (AT GRADE)
- RAILROAD TRACK (BURIED)
- CHAIN LINK FENCE
- BLDG BUILDING
- PREVIOUSLY BACKFILLED SUBSURFACE STRUCTURE
- PREVIOUSLY DECOMMISSIONED SUBSURFACE STRUCTURE THAT EXTENDS GREATER THAN 10 FEET BELOW GRADE
- EXISTING PIT
- EXISTING SUBSURFACE STRUCTURE EXTENDED GREATER THAN 10 FEET BELOW GRADE
- EXISTING TRENCH
- UG UNDERGROUND

[ ]=APPROXIMATE LIMITS OF FILL

NorCal Engineering SOILS AND GEOTECHNICAL CONSULTANTS	PHASE IIIA **LOCATION OF COMPACTION TESTS**
AIS	
PROJECT 17007-13 / DATE SEPTEMBER 2014	

SUMMARY OF COMPACTION TEST RESULTS

Date of Test	Test No.	Location	Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type	Test S/D
6/18/14	669	Excavation Bkfl.	15.0-15.5	10.6	119.2	91	I	S
6/18/14	670	Excavation Bkfl.	13.0-13.5	13.2	116.1	94	II	S
6/18/14	671	Excavation Bkfl.	11.0-11.5	11.5	120.8	92	I	S
6/19/14	672	Excavation Bkfl.	9.0-9.5	10.6	121.8	93	I	S
6/19/14	673	Excavation Bkfl.	7.0-7.5	11.9	119.0	91	I	S
6/19/14	674	Excavation Bkfl.	5.0-5.5	11.5	126.5	90	III	S
7/2/14	675	Excavation Bkfl.	3.0-3.5	11.8	118.9	91	I	S
7/8/14	676	Excavation Bkfl.	5.0-5.5	10.9	100.2	91	IV	S
7/8/14	677	Excavation Bkfl.	3.0-3.5	12.5	118.1	90	I	S
7/8/14	678	Excavation Bkfl.	1.0-1.5	11.3	109.7	92	V	S
7/8/14	679	Excavation Bkfl.	0.0-0.5	10.2	110.8	93	V	S
7/8/14	680	Excavation Bkfl.	1.0-1.5	11.2	109.5	92	V	S
7/8/14	681	Excavation Bkfl.	0.0-0.5	11.6	112.0	94	V	S

**Retest of failing tests after area reworked
S= Sand Cone Method

NorCal Engineering

Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

September 23, 2014 Project Number 17007-13

American Integrated Services
P.O. Box 92316
Long Beach, California 90809

Attn: David Herrera

Re: **Observation and Testing of Excavation Backfill Operations** (Phase IV) – Located at 3200 Fruitland Avenue, in the City of Vernon, California

Dear Mr. Herrera:

Pursuant to your request, this firm has observed and tested the excavation backfill operations for the above referenced project. The excavation areas as shown in our report dated September 15, 2014 have been backfilled to the approval of this firm and in conformance with the below grade demolition plan requirements. We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

REGISTERED PROFESSIONAL ENGINEER
KEITH D. TUCKER
No. 841
Exp. 12/31/14
GEOTECHNICAL
STATE OF CALIFORNIA

Keith D. Tucker
Project Engineer
R.G.E. 841

Walter K. Mott
Project Manager

NorCal Engineering

Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

September 15, 2014 Project Number 17007-13

American Integrated Services
P.O. Box 92316
Long Beach, California 90809

Attn: David Herrera

Re: **Report of Geotechnical Observation and Testing of Excavation Backfill Operations** (Phase IV) – Located at 3200 Fruitland Avenue, in the City of Vernon, California

Dear Mr. Herrera:

Pursuant to your request, this firm has provided this geotechnical report to summarize the observation and testing performed by this firm for the excavation backfill operations at the above referenced project. Our geotechnical services pertaining to the backfill are summarized in the subsequent sections of this report. The report contains test results for Phase IV backfill operations, only. Backfill operations were performed concurrently at other locations on the site, therefore compaction test numbers in this report may not be consecutive. Compaction test results for backfill operations performed in other phases on the site will be addressed in a subsequent compaction report.

Backfill Operations

The fill areas consisted of multiple excavations as outlined on the attached plan. The excavation areas were cleansed of all demolition debris and low density soils to expose competent native soils. The excavation bottoms were observed and approved by this firm prior to placement of fill. Fill material placed was compacted to a minimum of 90% of the laboratory standard in lifts not in excess of eight inches in thickness. An excavator mounted sheepsfoot wheel was utilized for compaction control. A water truck provided moisture control. The excavation areas as shown in this report were backfilled to the approval of this firm and in conformance with the below grade demolition plan requirements.

Laboratory/Field Testing

The relative compaction was determined by Sand Cone Method (ASTM: D1556-07). The maximum density of the fill soils was obtained by the laboratory standard (ASTM: D1557-07) and results are shown on Table I. Tests were performed a minimum of every 500 cubic yards placed and every two feet in depth of fill placed. A summary of the compaction tests are included with locations shown on the accompanying plan.

No chemical analysis of soils was performed by this firm and is not within the scope of our services.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

REGISTERED PROFESSIONAL ENGINEER
KEITH D. TUCKER
No. 841
Exp. 12/31/14
GEOTECHNICAL
STATE OF CALIFORNIA

Keith D. Tucker
Project Engineer
R.G.E. 841

Walter K. Mott
Project Manager

APPENDICES

(In order of appearance)

Appendix A – Laboratory Tests

Table I – Maximum Density Tests

Appendix B – Summary of Compaction Tests

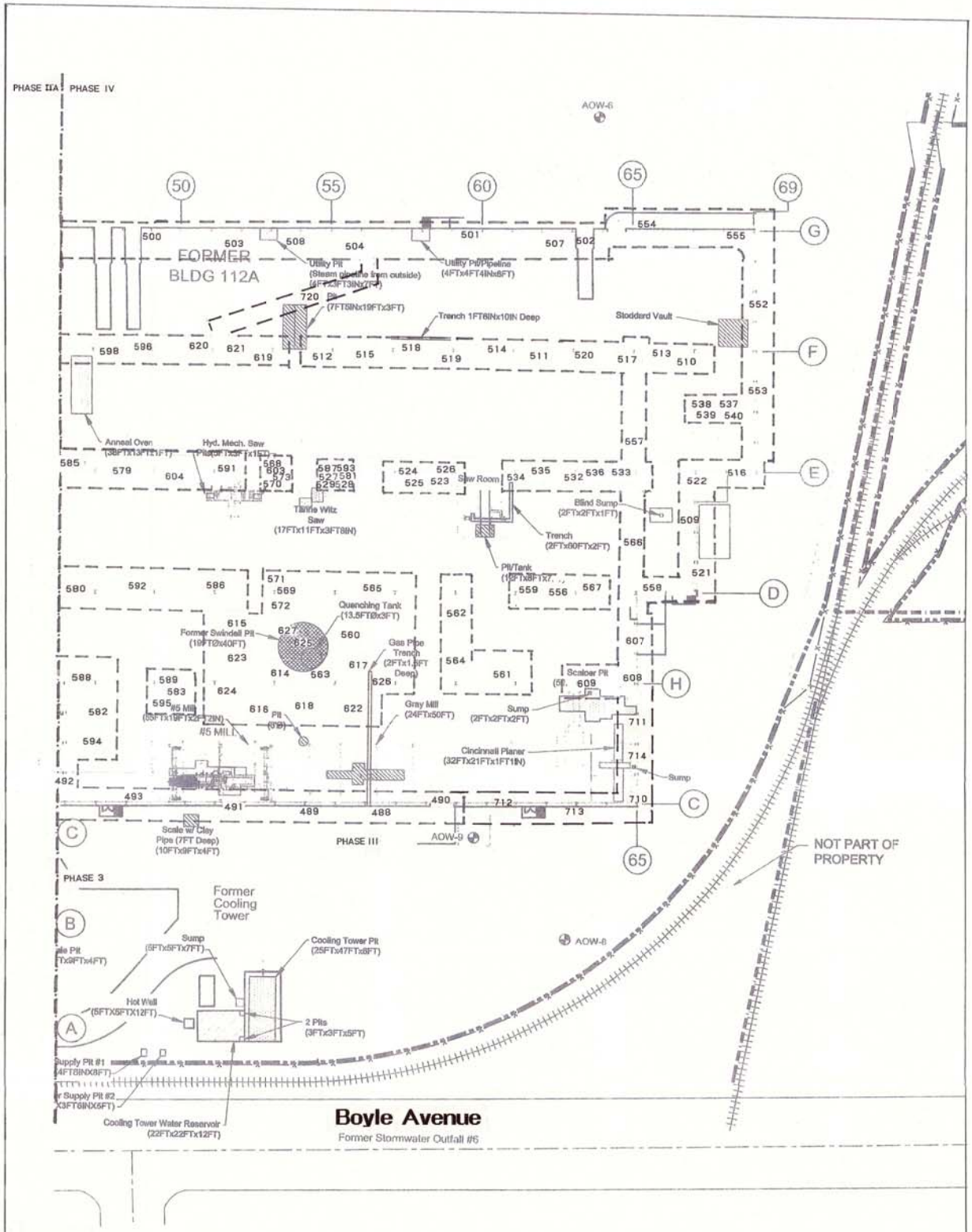
Site Plan
Summary of Compaction Tests

Appendix A

TABLE I
MAXIMUM DENSITY TESTS
(ASTM: D1557-07)

Sample	Classification	Optimum Moisture	Maximum Dry Density (lbs./cu.ft.)
I	Sandy SILT	11.0	131.0
II	Sandy SILT	11.5	119.0
III	Crushed Miscellaneous Base	10.0	140.5
IV	Crushed Miscellaneous Base	8.5	128.5
V	Sandy SILT	11.0	140.0
VI	Crushed Miscellaneous Base	9.5	142.0
VII	Clayey SAND	12.5	123.0
VIII	Silty SAND	13.0	117.5

Appendix B



EXPLANATION

- GROUNDWATER MONITORING WELL
- COLUMN AND ROW NUMBERING SYSTEM FOR FOOTINGS
- LIMITS OF WORK
- PARCEL BOUNDARY
- RAILROAD TRACK (AT GRADE)
- RAILROAD TRACK (BURIED)
- CHAIN LINK FENCE
- BLDG BUILDING
- PREVIOUSLY BACKFILLED SUBSURFACE STRUCTURE
- PREVIOUSLY DECOMMISSIONED SUBSURFACE STRUCTURE THAT EXTENDS GREATER THAN 10 FEET BELOW GRADE
- EXISTING PIT
- EXISTING SUBSURFACE STRUCTURE EXTENDED GREATER THAN 10 FEET BELOW GRADE
- EXISTING TRENCH
- UG UNDERGROUND

1"=50'

[ ] =APPROXIMATE LIMITS OF FILL

NorCal Engineering SOILS AND GEOTECHNICAL CONSULTANTS		PHASE IV LOCATION OF COMPACTION TESTS
AIS		
PROJECT 17007-13	DATE SEPTEMBER 2014	SHEET 2

SUMMARY OF COMPACTION TEST RESULTS

Date of Test	Test No.	Location	Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type	Test S/D
3/25/14	488	Excavation Bkfl.	6.5-7.0	12.7	119.2	91	I	S
3/25/14	489	Excavation Bkfl.	4.5-5.0	11.6	122.9	94	I	S
3/25/14	490	Excavation Bkfl.	2.5-3.0	12.5	118.0	90	I	S
4/1/14	491	Excavation Bkfl.	6.0-6.5	11.2	120.7	92	I	S
4/1/14	492	Excavation Bkfl.	6.0-6.5	10.8	122.5	94	I	S
4/1/14	493	Excavation Bkfl.	4.0-4.5	11.8	118.5	90	I	S
4/14/14	500	Excavation Bkfl.	6.0-6.5	10.7	109.1	92	II	S
4/14/14	501	Excavation Bkfl.	6.0-6.5	10.2	111.5	94	II	S
4/14/14	502	Excavation Bkfl.	4.0-4.5	11.7	120.7	92	I	S
4/14/14	503	Excavation Bkfl.	4.0-4.5	11.5	121.3	93	I	S
4/14/14	504	Excavation Bkfl.	2.0-2.5	11.9	120.4	92	I	S
4/14/14	507	Excavation Bkfl.	0.0-0.5	11.5	120.0	92	I	S
4/15/14	508	Excavation Bkfl.	0.0-0.5	10.1	119.8	91	I	S
4/21/14	509	Excavation Bkfl.	6.0-6.5	9.1	122.8	94	I	S
4/21/14	510	Excavation Bkfl.	6.0-6.5	10.1	128.3	91	III	S
4/21/14	511	Excavation Bkfl.	6.0-6.5	10.6	122.2	93	I	S
4/21/14	512	Excavation Bkfl.	6.0-6.5	9.8	119.0	91	I	S
4/21/14	513	Excavation Bkfl.	4.0-4.5	11.3	130.5	93	III	S
4/21/14	514	Excavation Bkfl.	4.0-4.5	10.9	130.5	93	III	S
4/21/14	515	Excavation Bkfl.	4.0-4.5	10.3	123.6	94	I	S
4/21/14	516	Excavation Bkfl.	4.0-4.5	10.6	122.9	94	I	S
4/22/14	517	Excavation Bkfl.	2.0-2.5	12.2	119.7	91	I	S
4/22/14	518	Excavation Bkfl.	2.0-2.5	10.9	118.3	90	I	S
4/22/14	519	Excavation Bkfl.	0.0-0.5	11.2	130.3	93	III	S
4/22/14	520	Excavation Bkfl.	0.0-0.5	10.9	126.6	90	III	S
4/22/14	521	Excavation Bkfl.	2.0-2.5	11.2	122.9	94	I	S
4/22/14	522	Excavation Bkfl.	0.0-0.5	10.4	120.9	92	I	S
4/22/14	523	Excavation Bkfl.	6.0-6.5	13.2	111.9	85	I	S
4/22/14	523A**	Excavation Bkfl.	6.0-6.5	12.3	119.7	91	I	S
4/22/14	524	Excavation Bkfl.	4.0-4.5	10.3	120.8	94	IV	S
4/22/14	525	Excavation Bkfl.	2.0-2.5	9.9	121.5	95	IV	S
4/22/14	526	Excavation Bkfl.	0.0-0.5	9.4	119.7	93	IV	S

**Retest of failing tests after area reworked
S= Sand Cone Method

SUMMARY OF COMPACTION TEST RESULTS

Date of Test	Test No.	Location	Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type	Test S/D
4/22/14	527	Excavation Bkfl.	6.0-6.5	11.8	121.8	93	I	S
4/22/14	528	Excavation Bkfl.	4.0-4.5	10.3	119.5	91	I	S
4/22/14	529	Excavation Bkfl.	2.0-2.5	11.4	130.7	93	III	S
4/24/14	532	Excavation Bkfl.	6.5-7.0	9.7	123.3	94	I	S
4/24/14	533	Excavation Bkfl.	5.0-5.5	11.1	132.6	94	II	S
4/24/14	534	Excavation Bkfl.	3.0-3.5	11.9	130.3	93	III	S
4/24/14	535	Excavation Bkfl.	2.0-2.5	11.5	128.7	92	III	S
4/24/14	536	Excavation Bkfl.	0.0-0.5	9.8	118.6	92	IV	S
4/24/14	537	Excavation Bkfl.	5.0-5.5	11.4	119.9	92	I	S
4/24/14	538	Excavation Bkfl.	3.0-3.5	11.1	122.4	93	I	S
4/24/14	539	Excavation Bkfl.	1.0-1.5	10.8	118.0	90	I	S
4/24/14	540	Excavation Bkfl.	0.0-0.5	11.1	120.2	92	I	S
4/29/14	552	Excavation Bkfl.	6.0-6.5	11.1	123.3	94	I	S
4/29/14	553	Excavation Bkfl.	4.0-4.5	10.1	118.8	91	I	S
4/29/14	554	Excavation Bkfl.	2.0-2.5	9.4	120.9	92	I	S
4/29/14	555	Excavation Bkfl.	0.0-0.5	10.4	120.5	92	I	S
4/30/14	556	Excavation Bkfl.	6.0-6.5	11.1	127.1	91	V	S
4/30/14	557	Excavation Bkfl.	6.0-6.5	10.1	122.3	93	I	S
5/1/14	558	Excavation Bkfl.	4.0-4.5	8.7	129.1	91	VI	S
5/1/14	559	Excavation Bkfl.	4.0-4.5	9.5	129.4	91	VI	S
5/1/14	560	Excavation Bkfl.	6.0-6.5	9.1	121.8	93	I	S
5/1/14	561	Excavation Bkfl.	6.0-6.5	9.3	119.5	91	I	S
5/1/14	562	Excavation Bkfl.	4.0-4.5	10.6	120.9	92	I	S
5/1/14	563	Excavation Bkfl.	4.0-4.5	10.1	118.1	90	I	S
5/1/14	564	Excavation Bkfl.	2.0-2.5	9.6	120.5	92	I	S
5/1/14	565	Excavation Bkfl.	2.0-2.5	10.4	120.1	92	I	S
5/1/14	566	Excavation Bkfl.	2.0-2.5	12.7	112.2	91	VII	S
5/1/14	567	Excavation Bkfl.	2.0-2.5	13.9	112.6	92	VII	S
5/5/14	568	Excavation Bkfl.	6.0-6.5	11.3	126.6	90	V	S
5/5/14	569	Excavation Bkfl.	6.0-6.5	10.6	118.1	90	I	S
5/5/14	570	Excavation Bkfl.	4.0-4.5	9.8	118.9	91	I	S
5/5/14	571	Excavation Bkfl.	4.0-4.5	10.7	119.1	91	I	S

**Retest of failing tests after area reworked
S= Sand Cone Method

SUMMARY OF COMPACTION TEST RESULTS

Date of Test	Test No.	Location	Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type	Test S/D
5/5/14	572	Excavation Bkfl.	2.0-2.5	9.4	120.7	92	I	S
5/5/14	573	Excavation Bkfl.	2.0-2.5	10.5	119.8	91	I	S
5/13/14	579	Excavation Bkfl.	6.0-6.5	10.0	118.9	91	I	S
5/13/14	580	Excavation Bkfl.	6.0-6.5	9.2	119.0	91	I	S
5/13/14	581	Excavation Bkfl.	6.0-6.5	10.2	119.9	92	I	S
5/13/14	582	Excavation Bkfl.	6.0-6.5	10.9	118.5	90	I	S
5/13/14	583	Excavation Bkfl.	6.0-6.5	9.5	120.9	92	I	S
5/13/14	584	Excavation Bkfl.	6.0-6.5	9.8	120.1	92	I	S
5/14/14	585	Excavation Bkfl.	4.0-4.5	11.1	123.5	94	I	S
5/14/14	586	Excavation Bkfl.	4.0-4.5	11.8	113.6	87	I	S
5/14/14	586A**	Excavation Bkfl.	4.0-4.5	11.5	118.4	90	I	S
5/14/14	587	Excavation Bkfl.	4.0-4.5	10.6	120.2	92	I	S
5/14/14	588	Excavation Bkfl.	4.0-4.5	10.9	119.8	91	I	S
5/14/14	589	Excavation Bkfl.	4.0-4.5	11.3	121.5	93	I	S
5/14/14	591	Excavation Bkfl.	2.0-2.5	10.7	118.3	90	I	S
5/14/14	592	Excavation Bkfl.	2.0-2.5	10.1	120.4	92	I	S
5/14/14	593	Excavation Bkfl.	2.0-2.5	11.0	121.2	93	I	S
5/14/14	594	Excavation Bkfl.	2.0-2.5	11.5	118.9	91	I	S
5/14/14	595	Excavation Bkfl.	2.0-2.5	12.1	120.7	92	I	S
5/14/14	596	Excavation Bkfl.	6.0-6.5	11.3	120.5	92	I	S
5/14/14	598	Excavation Bkfl.	2.0-2.5	11.2	119.4	91	I	S
5/27/14	603	Excavation Bkfl.	0.0-0.5	11.2	117.9	90	I	S
5/27/14	604	Excavation Bkfl.	0.0-0.5	9.4	120.9	94	IV	S
5/27/14	607	Excavation Bkfl.	6.0-6.5	10.3	119.1	91	I	S
5/27/14	608	Excavation Bkfl.	4.0-4.5	9.5	118.9	91	I	S
5/27/14	609	Excavation Bkfl.	2.0-2.5	10.4	122.2	93	I	S
6/2/14	614	Excavation Bkfl.	20.0-20.5	12.3	107.7	92	VIII	S
6/2/14	615	Excavation Bkfl.	18.0-18.5	11.8	109.5	93	VIII	S
6/2/14	616	Excavation Bkfl.	16.0-16.5	11.0	109.1	93	VIII	S
6/2/14	617	Excavation Bkfl.	14.0-14.5	11.2	120.7	92	I	S
6/2/14	618	Excavation Bkfl.	13.0-13.5	10.5	120.5	92	I	S
6/2/14	619	Excavation Bkfl.	6.0-6.5	11.1	119.1	91	I	S

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SUMMARY OF COMPACTION TEST RESULTS

Date of Test	Test No.	Location	Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type	Test S/D
6/2/14	620	Excavation Bkfl.	4.0-4.5	10.3	120.6	92	I	S
6/2/14	621	Excavation Bkfl.	2.0-2.5	10.7	118.4	90	I	S
6/2/14	622	Excavation Bkfl.	11.0-11.5	9.6	118.0	90	I	S
6/2/14	623	Excavation Bkfl.	9.0-9.5	10.1	119.2	91	I	S
6/2/14	624	Excavation Bkfl.	7.0-7.5	10.7	117.3	91	IV	S
6/2/14	625	Excavation Bkfl.	5.0-5.5	8.9	122.4	95	IV	S
6/2/14	626	Excavation Bkfl.	3.0-3.5	9.1	119.2	93	IV	S
6/2/14	627	Excavation Bkfl.	1.0-1.5	9.2	121.7	95	IV	S
8/21/14	710	Excavation Bkfl.	6.5-7.0	11.4	104.9	95	IX	S
8/21/14	711	Excavation Bkfl.	4.5-5.0	11.9	118.9	91	I	S
8/21/14	712	Excavation Bkfl.	2.5-3.0	11.5	120.7	92	I	S
8/21/14	713	Excavation Bkfl.	1.0-1.5	13.0	118.6	99	I	S
8/21/14	714	Excavation Bkfl.	0.0-0.5	8.4	123.5	96	IV	S
9/9/14	720	Excavation Bkfl.	5.0-5.5	7.7	93.5	85	IX	S
9/9/14	720A**	Excavation Bkfl.	5.0-5.5	10.3	102.6	93	IX	S

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