SHALLOW SOIL EXCAVATION CLOSURE, PLANTER AREA, PARCEL A
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

Prepared for

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1. INTRODUCTION AND PURPOSE

Boeing Realty Corporation (BRC) has completed the remediation of shallow soils (surface to 12 feet below ground surface [bgs]) impacted with arsenic within the planter area of Parcel A (Site) as shown in Figure 1 & 2. Elevated arsenic concentrations in shallow soil on Parcel A were detected during shallow soil remediation being performed on the adjacent Parcel C. This remediation was performed in accordance with the Regional Water Quality Control Board, Los Angeles Region (LARWQCB) – approved Work plan to Perform Shallow Soil Remediation Excavation Activities – Parcel A, Former C-6 Facility, Los Angeles, California (work plan) (Haley & Aldrich, Inc., 2003). This report summarizes the remediation efforts which include:

- Survey of the planter area and location of previous samples as described in the work plan;
- Clearing and grubbing of the planter area;
- Removal of shallow soil with arsenic impacts greater than 14 milligrams per kilogram (mg/kg);
- Sampling to confirm that arsenic impacts above 14 mg/kg were removed; and
- Backfill of the excavation with non-impacted soil.

This remediation excavation was performed to maintain the conditions of the existing LARWQCB shallow soil closure for the Site.

2. BACKGROUND

This shallow soil remediation excavation was performed to remove arsenic-impacted soil above 14 mg/kg along the western boundary of Parcel A at BRC's Former C-6 Facility, located at 19503 South Normandie Avenue in Los Angeles, California. Parcel A is one of four parcels (Parcels A through D) at the former C-6 facility, as shown on Figure 2.

BRC acquired the Site in 1997. From 1997 to 1998, BRC performed Site assessment, remediation, and human health risk assessment activities. The California Department of Toxic Substances Control (DTSC), Human and Ecological Risk Division (HERD) reviewed and approved the human health risk assessment. Based on this approval, the LARWQCB granted a No Further Action determination on 21 April 1998 for shallow soil in Parcel A. In 1999, Parcel A was sold and redeveloped. Redeveloped land use includes a hotel, retail shops, and a former car dealership.

The following sections of this closure report present the Site description and history, geologic and hydrogeologic setting, and a summary of the previous shallow soil investigation and remediation activities.

2.1 Site Description and History

Parcel A occupies approximately 50 acres in the northern portion of the Site (Figure 2). It is bordered by 190th Street to the north, railroad tracks and South Normandie Avenue to the east, Parcel C to the south and southwest, and Harborgate Way, Parcel B and International Light Metals to the west. Aerial photographs indicate the area was farmland before the 1940s. Industrial use of Parcel A began in 1941, when it was developed as part of an aluminum reduction plant. In 1948, the aluminum reduction plant was converted to a steel manufacturing facility. In 1952, the Douglas Aircraft Company (DAC) used the Site to manufacture aircraft and aircraft components until approximately 1992. Prior to redevelopment, Parcel A contained Buildings 34, 36, 37, 61, 44, 45, 57, 67, and the northern portions of Buildings 29 and 58. From 1992 to 1997, DAC used the buildings primarily for office space and storage.

2.2 Geologic Setting

The Site is located on the Torrance Plain physiographic area of the West Coast Basin. Groundwater monitoring wells and soil borings drilled at the Site have encountered the Lakewood Formation, which consists of two major Hydrostratigraphic Units; the Bellflower Aquitard and the Gage Aquifer. Groundwater monitoring wells at the Site have only been installed within the Bellflower Aquitard, which extends to a depth of approximately 140 feet bgs. The Bellflower Aquitard below the Site consists of fine-grained soils (predominantly interbedded fine sands, silts, and clays) (Haley & Aldrich, 2002a).

2.3 Hydrogeologic Setting

Groundwater at the Site is located in sediments of the Bellflower Aquitard (Haley & Aldrich, 2002a). The uppermost groundwater occurs under water table conditions at depths of approximately 60 to 70 feet bgs. Most of the former C-6 facility groundwater monitoring wells are screened near the water table at depths ranging from 55 to 90 feet bgs. No groundwater monitoring wells currently exist in Parcel A, as a result of the current redevelopment activities. Groundwater flow on the former C-6 facility is predominately to the south, under a gradient of approximately 0.001 feet/feet (Haley & Aldrich, 2002a).

2.4 Previous Soil Investigation and Remediation

Demolition activities on Parcel A took place in 1997 and 1998. Soils at the Site were extensively characterized between 1997 and 1998. Soils with concentrations above the Site remediation goals were remediated and confirmation soil samples were collected and analyzed in accordance with the LARWQCB-approved Sampling and Analysis Plan for Demolition Activities, prepared by Integrated Environmental Services, Inc. (Integrated, 1997a). Remediation excavation activities were performed on Parcel A in 1997 and 1998. Approximately 47,800 cubic yards of shallow soil impacted with volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total recoverable petroleum hydrocarbons (TRPH), poly-chlorinated biphenyls (PCBs), and/or metals exceeding the target health-based remediation goals (HBRGs), developed by Integrated (Integrated, 1997b), were excavated.

Following remediation excavations, a risk assessment was performed to verify that Parcel A met health-based criteria (Integrated, 1998). The DTSC-HERD reviewed and approved the post-demolition human health risk assessment. Based on the work completed and the DTSC-HERD human health risk assessment approval, the LARWQCB issued a closure and No Further Action Letter on 21 April 1998 for shallow soils in Parcel A (LARWQCB, 1998).

During soil remediation activities on the adjacent Parcel C in 2001, arsenic concentrations exceeding the HBRG of 14 mg/kg were detected along the boundary of Parcels A and C (Figure 3). A supplemental soil investigation was performed on Parcel A (Haley & Aldrich, Inc., 2002b) to evaluate the extent of arsenic impacts detected at the east edge of Parcel C. In August and September 2001, a total of 58 soil samples were collected from 29 soil borings on Parcel A to define the extent of arsenic impacts above 14 mg/kg. The samples were analyzed for arsenic by EPA Method 6010B, and the laboratory reported that arsenic was detected at concentrations ranging from 2.4 to 816 mg/kg (Figure 3).

Soil sampling activities were constrained to a narrow strip of Parcel A between a sewer and utility corridor to the east, and the Parcel A and C boundary to the west. This narrow strip of Parcel A was not excavated or re-graded during the installation of the sewer main in 1998. Remediation of arsenic-impacted soil in this area is described in the following sections.

3. EXCAVATION, CONFIRMATION SOIL SAMPLING, ANALYSIS AND RESULTS

A detailed description of the remediation plan for the Site is presented in the work plan (Haley & Aldrich, 2003). Work was performed on-Site between 15 January and 30 January 2004. A summary of the remediation activities and confirmation sampling results for the planter area in Parcel A is presented below.

3.1 Parcel A - Planter Area Excavation

The work plan called for the excavation of shallow soil impacted with arsenic from the planter area. The original limits of excavation discussed in the work plan are shown along with the historical sample results in Figure 3. Based on the in-place arsenic concentrations, the soil was classified as non-hazardous for waste disposal purposes by a Boeing waste management specialist. However, one area in the planter (approximately 20 ft by 10 ft) contained elevated concentrations of arsenic and required disposal as a hazardous waste (Figure 3). This area was excavated first and stored in a bin on-Site for transport off-Site as hazardous waste.

The remaining in-place soil was excavated, direct-loaded and transported off-Site under non-hazardous waste manifests on 19, 20, 21, 27 and 28 January 2004. Only excavation and stockpiling occurred on 27 January 2004. Confirmation soil samples were collected in the excavation by Haley & Aldrich and analyzed by Severn Trent Laboratories (STL).

Excavation work was performed by Innovative Construction Solutions under a one-year Various Locations Rule 1166 Contaminated Soil Mitigation Plan (Plan No. 420450) issued by the South Coast Air Quality Management District (SCAQMD) on 10 October 2003. Notification Form reference number 65882 was received from the SCAQMD on 13 January 2004. Per the requirements of Rule 1166 and the SCAQMD, air monitoring for VOC's using a photo ionization detector (PID) was performed during all excavation activities. No detections of VOC's were observed.

Confirmation soil samples were collected with a hand auger to sampling depths at the limits of the original excavation. Soil samples were collected from the hand auger bucket and placed in glass jars with Teflon-lined lids. The jars were labeled and placed on ice in a cooler for shipment to the analytical laboratory under chain of custody protocol.

In accordance with the work plan, one sample was collected for every 200 square feet (ft^2) of sidewall and one sample was collected for every 400 ft^2 of excavation floor. Sidewall samples were collected at a depth of approximately 2.5 ft bgs. Floor samples were collected from the base of the excavation at a depth of approximately 5 ft bgs. Upon completion of the planned excavation limits, a total of 38 confirmation soil samples were collected. Of these samples, six sidewall samples and one floor sample (CSA_015, CSA_017, CSA_019, CSA_026, CSA_033, CSA_036, CSA_044) exceeded the Site remediation goal of 14 mg/kg total arsenic. Nine additional confirmation soil samples were collected and analyzed for arsenic.

Two of these nine additional step-out confirmation soil samples (CSA_046 and CSA_047) had results that exceeded the Site remediation goal. An additional step-out excavation was performed and two additional confirmation soil samples collected were analyzed (CSA_49 and CSA_050). These final two confirmation soil samples had arsenic results less than 14 mg/kg and the excavation efforts were considered complete based on the scope of work presented in the work plan. Step-out excavations were performed on 27 and 28 January 2004. A total of approximately 1,800 cubic yards of soil was excavated from the planter area. The final limits of the excavation are shown in Figure 4.

3.2 Confirmation Soil Sampling Analysis and Results

Forty seven (47) confirmation soil samples were analyzed by EPA Method 6010B for total arsenic. Based on the results of the laboratory analyses of soil confirmation samples, the final limits of the excavation had arsenic concentrations ranging from 2.6 mg/kg to 13.2 mg/kg. The results of the analysis are presented in Table I and on Figure 4. Laboratory data are included in Appendix B. The data validation report is included in Appendix C.

3.3 Excavation Backfilling and Compaction Activities

Upon completion of remedial soil excavation and confirmation sampling, the excavation was backfilled with clean import fill. The import soil source site was screened for industrial use. No industrial use was evident, so a representative soil sample was collected (as a grab sample) and analyzed for organic and inorganic chemicals. Prior to acceptance of import fill several criteria had to be met:

- All metals concentrations had to be below the Parcel A background concentrations; and
- All TPH, VOC, PCB, pesticides and polynuclear aromatic hydrocarbon (PAH) concentrations had to be non-detect.

Based on the results of the laboratory analyses of the import soil sample, import soils from the identified source were accepted as backfill for the Parcel A excavation. Appendix D discusses the import soil sample collection and evaluation in more detail.

Import soil was placed in the excavation to the original grade of the Site prior to excavation. Compaction to a minimum of 90 percent of the maximum dry density was performed according to the work plan.

3.4 Waste Disposition

Excavated hazardous soil and decontamination rinse water were collected and stored in a roll-off bin and 55-gallon drum respectively and profiled for disposal off-Site. Non-hazardous soil was direct loaded for off-Site disposal. Manifests are currently being received from the waste

disposal facilities. Copies of the manifests will be sent under a separate transmittal to the LARWQCB when all copies are received.

4. CONCLUSIONS

The planter area of Parcel A has undergone remediation of shallow soil in accordance with the work plan. Shallow soil excavation was conducted and arsenic impacts in excess of 14 mg/kg have been remediated as directed by DTSC-HERD. The Site closure should remain in place based on the following information and conclusions:

- Approximately 1,800 cubic yards of soil were removed from the shallow soil excavation of the planter area of Parcel A;
- Confirmation sampling indicates that residual concentrations of arsenic remaining in shallow soil are below the Site remediation goal for arsenic of 14 mg/kg; and
- The excavation was backfilled with soils meeting the import soil criteria for the Site.

Based on the results of the remediation and confirmation sampling activities, shallow soil in the planter area of Parcel A meets the criteria of the original 1998 DTSC-HERD and LARWQCB closure, and can remain closed with no further action required.

REFERENCES

1. Haley & Aldrich, Inc., 2003, Work plan to Perform Shallow Soil Remediation Excavation Activities – Parcel A, Former C-6 Facility, Los Angeles, California, Prepared for Boeing Realty Corporation, Long Beach, California, dated September 2003.

2. Haley & Aldrich, Inc., 2002a, Site-Wide Groundwater Assessment Report, Boeing Realty Corporation, Former C-6 Facility, Los Angeles, California, Prepared for Boeing Realty Corporation, Long Beach, California, dated October 31, 2002.

3. Haley & Aldrich, Inc., 2002b, Technical Memorandum, Arsenic Soil Sampling Results, Western Boundary of Parcel A, Boeing Realty Corporation, Former C-6 Facility, Los Angeles, California, Prepared for Boeing Realty Corporation, Long Beach, California, dated April 22, 2002.

4. Integrated Environmental Services, Inc., 1998, Parcel A Post-Demolition Risk Assessment, Boeing Realty Corporation C-6 Facility, Los Angeles, California, Prepared for Boeing Realty Corporation, Long Beach, California, and dated March 6, 1998.

5. Integrated Environmental Services, Inc., 1997a. Sampling and Analysis Plan for Demolition Activities at the Douglas Aircraft Company C-6 Facility, 1997.

6. Integrated Environmental Services, Inc., 1997b. Health-Based Remediation Goals for Surface Soils, McDonnell Douglas Realty Company, C-6 Facility, Parcel A, August 1997.

7. Los Angeles Regional Water Quality Control Board, 1998, No Further Action For Shallow Soil, Parcel A, Boeing Realty Corporation (BRC) C-6 Facility, Los Angeles (File No. 100.315 SLIC No. 410), dated April 21, 1998.

G:\Projects\ENVIRONMENTAL\28882_C6ProjectMngmt\403 Parcel A Arsenic Excavation\Closure Report\FINAL PDFs\FINAL to Boeing 3-9-04\FINAL Parcel A Excavation Closure Report Working Copy3-9-04.doc

Tables

Table I

Post Excavation and Confirmation Soil Sample Survey Data Table
Former C-6 Facility
Los Angeles, California

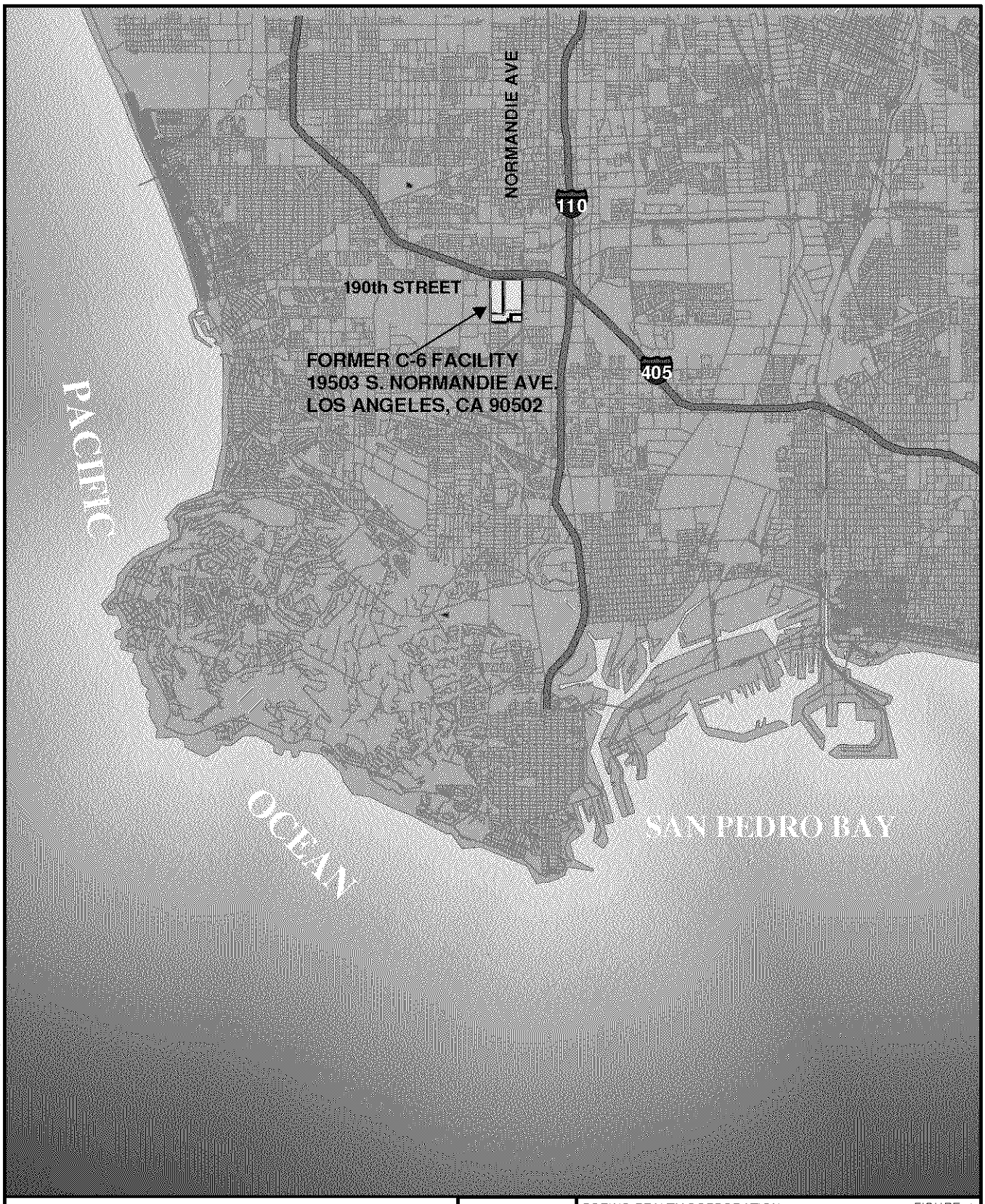
Sample Name	Northing	Easting	Elev	X_Coord	Y_Coord	Remediation Status	Sample Top Depth (feet)	Date Collected	Arsenic mg/kg
CSA001_SSSW02_0001	12748.185	12643.53	48.94	6470418.1980	1769535.9740	In-place	2	01/15/2004	2.7
CSA006_SSNW02_0001	13223.665	12643.65	47.72	6470418.3180	1770011.4540	In-place	2	01/15/2004	4.6
CSA011_SSEW02_0001	12846.886	12650.13	47.62	6470424.8010	1769634.6750	In-place	2	01/15/2004	11.9
CSA012_SSEW02_0002	13179.363	12649.793	46.76	6470424.4640	1769967.1520	In-place	2	01/15/2004	5.5
CSA013_SSEW02_0003	13217.727	12649.612	47.37	6470424.2830	1770005.5160	In-place	2	01/16/2004	5.7
CSA014_SSF05_0001	13217.987	12642.83	44.7	6470417.5010	1770005.7760	In-place	5	01/19/2004	3.9
CSA015_SSWW02_0001	13217.969	12639.524	47.73	6470414.1950	1770005.7580	Excavated	2	01/19/2004	15.4
CSA016_SSF05_0002	13179.051	12638.931	47.75	6470413.6020	1769966.8400	In-place	5	01/19/2004	4.5
CSA017_SSWW02_0002	13179.263	12643.938	44.27	6470418.6090	1769967.0520	Excavated	2	01/19/2004	35.6
CSA018_SSEW02_0004	13139.299	12649.884	46.06	6470424.5550	1769927.0880	In-place	2	01/19/2004	11.3
CSA019_SSF05_0003	13140.719	12643.537	43.7	6470418.2080	1769928.5080	Excavated	5	01/19/2004	44.5
CSA020_SSWW02_0003	13139.337	12638.645	47.21	6470413.3160	1769927.1260	In-place	2	01/19/2004	4.2
CSA021_SSWW02_0004	13099.743	12638.36	46.76	6470413.0310	1769887.5320	In-place	2	01/19/2004	9
CSA022_SSF05_0004	13099.138	12643.911	43.13	6470418.5820	1769886.9270	In-place	5	01/19/2004	5.6
CSA023_SSEW02_0005	13100.099	12649.747	45.74	6470424.4180	1769887.8880	In-place	2	01/19/2004	2.9
CSA024_SSEW02_0006	13059.727	12649.835	46.16	6470424.5060	1769847.5160	In-place	2	01/19/2004	3
CSA025_SSF05_0005	13058.79	12644.58	43.21	6470419.2510	1769846.5790	In-place	5	01/19/2004	4.5
CSA026_SSWW02_0005	13059.262	12638.533	47.19	6470413.2040	1769847.0510	Excavated	2	01/19/2004	19
CSA027_SSEW02_0007	13023.874	12649.869	46.84	6470424.5400	1769811.6630	In-place	2	01/19/2004	3.7
CSA028_SSF05_0006	13023.788	12644.689	43.72	6470419.3600	1769811.5770	In-place	5	01/19/2004	3
CSA029_SSWW02_0006	13023.774	12638.546	47.13	6470413.2170	1769811.5630	In-place	2	01/19/2004	8.7
CSA030_SSEW02_0008	12989.867	12653.244	47.68	6470427.9150	1769777.6560	In-place	2	01/20/2004	8.9
CSA031_SSF05_0007	12991.116	12644.29	44.96	6470418.9610	1769778.9050	In-place	5	01/20/2004	3.6
CSA032_SSWW02_0007	12990.893	12638.428	47.4	6470413.0990	1769778.6820	In-place	2	01/20/2004	8.6
CSA033_SSEW02_0009	12940.436	12650.093	48.44	6470424.7640	1769728.2250	Excavated	2	01/20/2004	15.8
CSA034_SSF05_0008	12940.892	12643.227	45.62	6470417.8980	1769728.6810	In-place	5	01/20/2004	5.4
CSA035_SSWW02_0008	12940.432	12637.271	46.96	6470411.9420	1769728.2210	In-place	2	01/20/2004	3.9

Table I
Post Excavation and Confirmation Soil Sample Survey Data Table
Former C-6 Facility
Los Angeles, California

Sample Name	Northing	Easting	Elev	X_Coord	Y_Coord	Remediation Status	Sample Top Depth (feet)	Date Collected	Arsenic mg/kg
CSA036_SSEW02_0010	12891.22	12650.144	47.91	6470424.8150	1769679.0090	Excavated	2	01/20/2004	28
CSA037_SSF05_0009	12892.187	12643.544	45.11	6470418.2150	1769679.9760	In-place	5	01/20/2004	3.5
CSA038_SSWW02_0009	12891.467	12637.842	46.86	6470412.5130	1769679.2560	In-place	2	01/20/2004	8.4
CSA039_SSF05_0010	12847.554	12644.547	44.9	6470419.2180	1769635.3430	In-place	5	01/20/2004	3.6
CSA040_SSWW02_0010	12847.108	12638.118	46.83	6470412.7890	1769634.8970	In-place	2	01/20/2004	6.8
CSA041_SSEW02_0011	12810.823	12649.722	47.13	6470424.3930	1769598.6120	In-place	2	01/20/2004	7.8
CSA042_SSF05_0011	12810.916	12644.208	44.76	6470418.8790	1769598.7050	In-place	5	01/20/2004	4.5
CSA043_SSWW02_0011	12810.829	12638.288	46.74	6470412.9590	1769598.6180	In-place	2	01/20/2004	2.8
CSA044_SSEW02_0012	12765.09	12650.237	46.25	6470424.9080	1769552.8790	Excavated	2	01/21/2004	15.8
CSA045_SSF05_0012	12765.155	12644.502	43.99	6470419.1730	1769552.9440	In-place	5	01/21/2004	3.9
CSA046_SSWW02_0013	13218.489	12634.937	47.1	6470409.6080	1770006.2780	Excavated	2	01/20/2004	16.4
CSA047_SSWW02_0014	13180.138	12633.908	47.34	6470408.5790	1769967.9270	Excavated	2	01/20/2004	14.9
CSA049_SSWW02_0016	13219.133	12628.828	47.68	6470403.4990	1770006.9220	In-place	2	01/20/2004	10
CSA050_SSWW02_0017	13179.977	12628.023	48.35	6470402.6940	1769967.7660	In-place	2	01/20/2004	13.2
CSA052_SSWW02_0012	12765.131	12638.207	46.74	6470412.8780	1769552.9200	In-place	2	01/21/2004	2.6
CSA053_SSF08_0013	13138.93	12643.268	40.66	6470417.9390	1769926.7190	In-place	8	01/21/2004	4.4
CSA055_SSWW02_0019	13061.074	12631.617	46.71	6470406.2880	1769848.8630	In-place	2	01/21/2004	13
CSA056_SSEW02_0013	12940.436	12651.093	48.44	6470425.7640	1769728.2250	In-place	2	01/21/2004	8.2
CSA058_SSEW02_0015	12891.22	12651.144	47.91	6470425.8150	1769679.0090	In-place	2	01/21/2004	6.1
CSA_062_SSEW02_0017	12765.09	12651.237	46.25	6470425.9080	1769552.8790	In-place	2	01/22/2004	7.4

QA/QC: _____
Date: _____

Figures



N

2 1 0 2 Miles

28882-101

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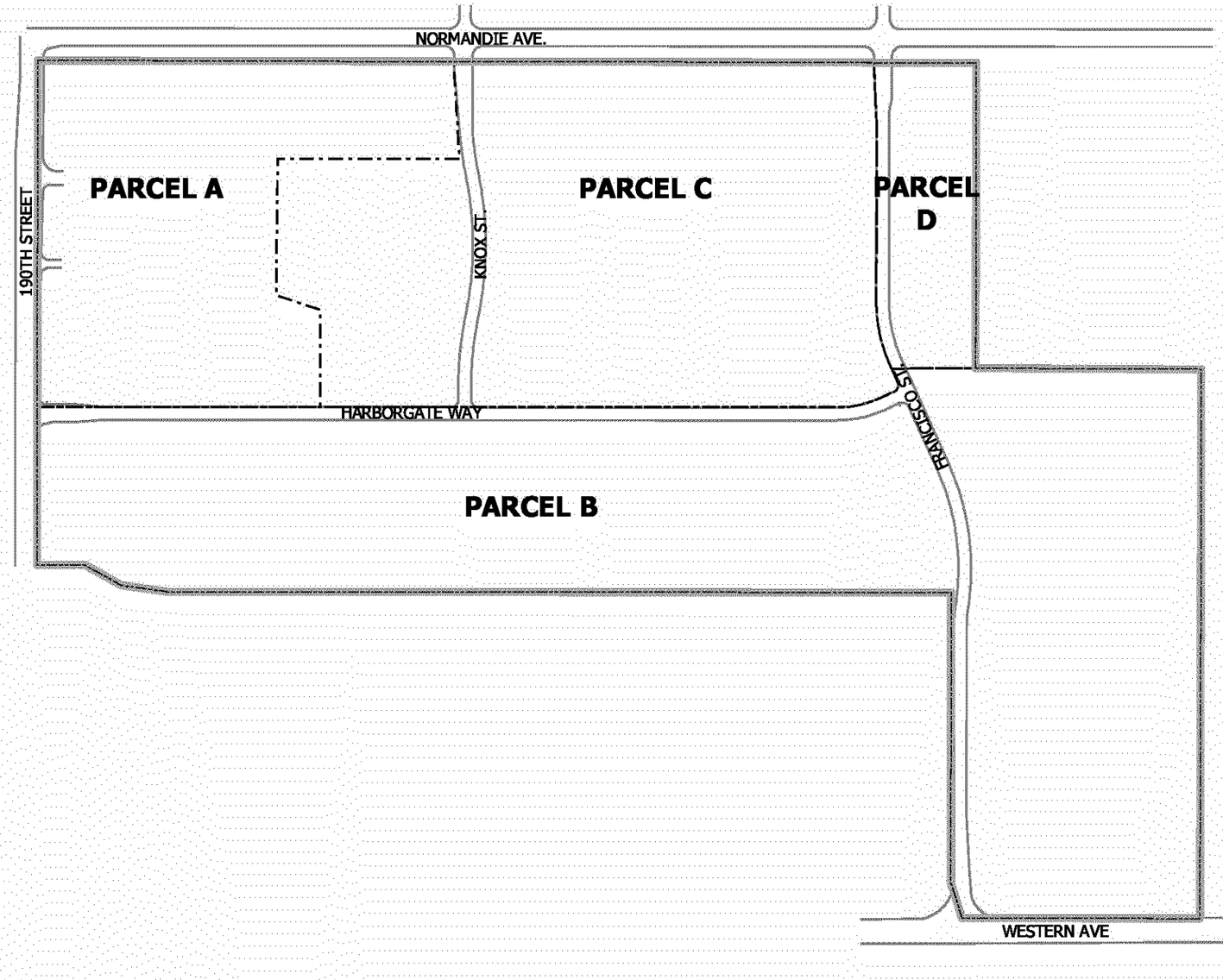
LOS ANGELES, CALIFORNIA

FIGURE 1

SITE LOCATION MAP

SCALE: AS SHOWN

MARCH 2004



Legend

Property Boundary

Parcel Boundary

N

All Locations and Dimensions are Approximate

0 225 450 900 Feet

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LOS ANGELES, CALIFORNIA

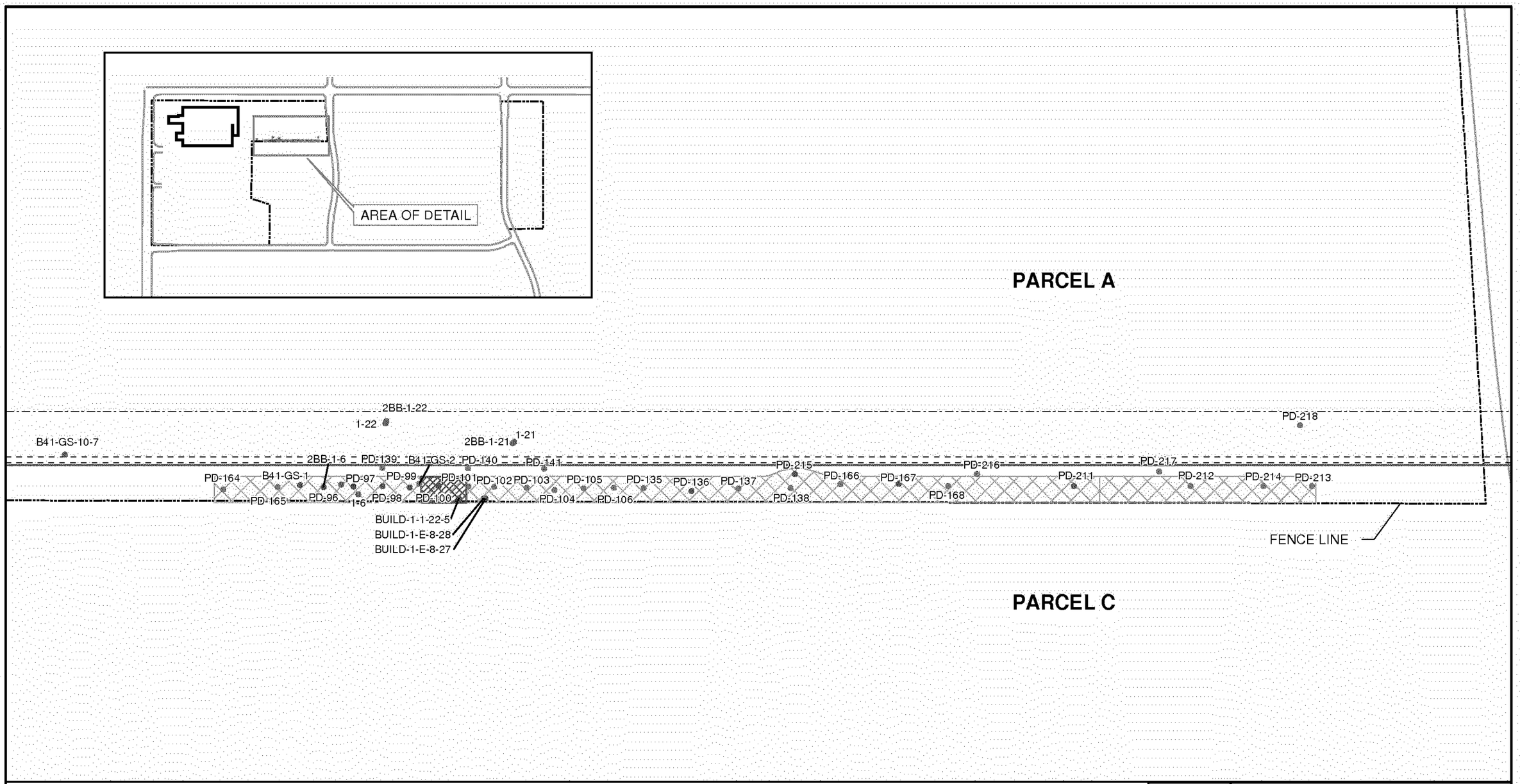
FIGURE 2

SITE PLAN

SCALE AS SHOWN

MARCH 2004

28882-602



Legend

Previous Soil Boring

- ND
- >ND - 14 mg/kg
- >14 mg/kg - 816 mg/kg

- Right of Way
- Storm Drain
- Underground Electrical Line
- Water Line

- Parcel A Boundary
- Proposed WalMart Building Location
- Proposed Excavation Area
- Soil Characterized and Disposed of Hazardous Waste

N

ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

0 20 40 80 Feet

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LOS ANGELES, CALIFORNIA

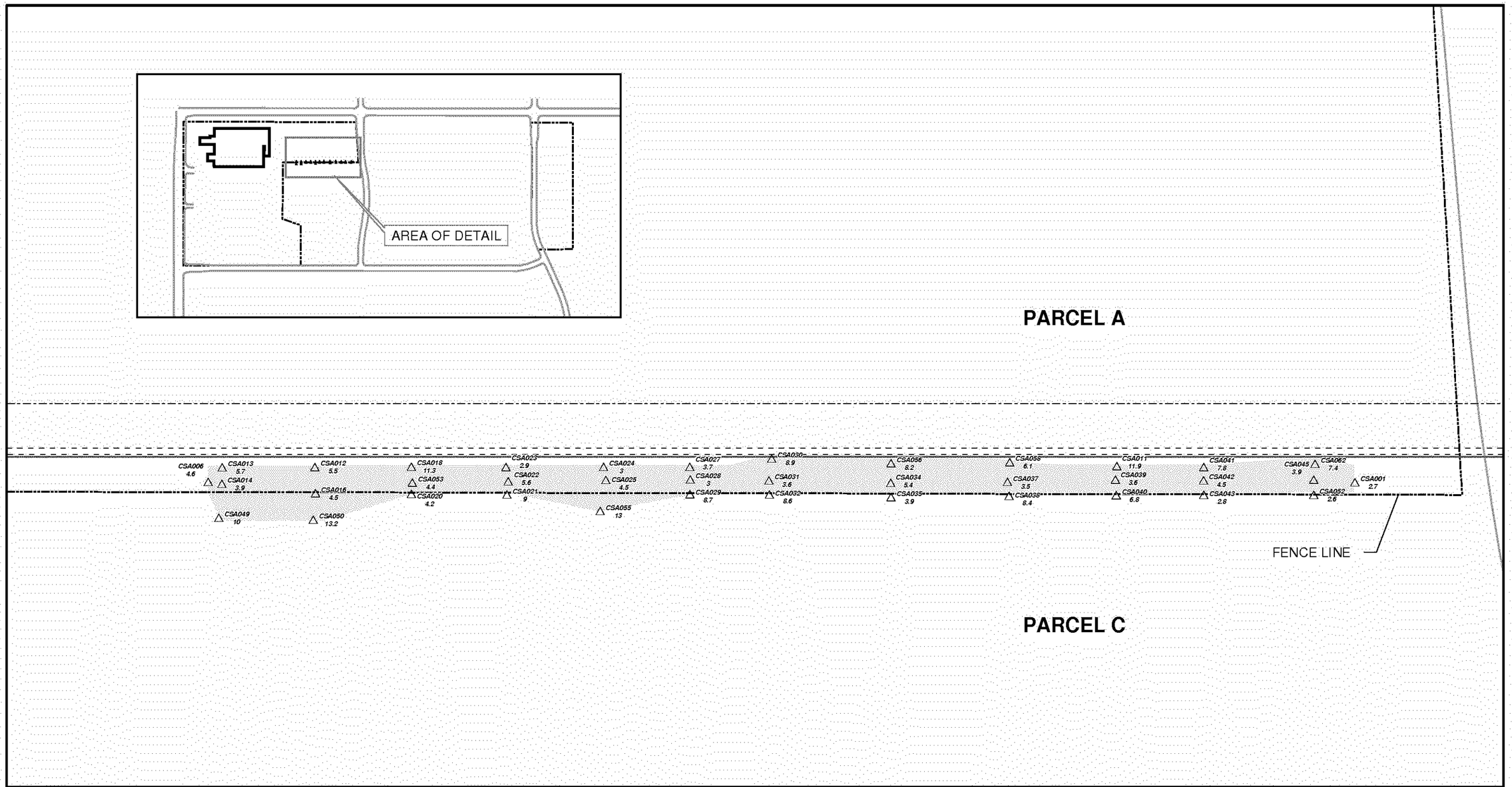
FIGURE 3

PARCEL A -
PREVIOUS SOIL BORING
AND PROPOSED EXCAVATION

SCALE AS SHOWN

MARCH 2004

28882-404



Legend

- △ Confirmation Sample Location
- CSA047 Identification
- 14.9 Arsenic Results in mg/kg
- Right of Way
- Storm Drain
- Underground Electrical Line
- Water Line
- Parcel A Boundary
- Proposed WalMart Building Location
- Excavation

N

ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

0 20 40 80 Feet

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FIGURE 4

PARCEL A - CONFIRMATION SAMPLING LOCATION AND EXCAVATION

SCALE AS SHOWN

MARCH 2004

28882-404

APPENDIX A

Limitations

LIMITATIONS

This report was prepared by Haley & Aldrich, Inc., under the professional direction and review of the registered professionals listed on the cover page. The work described herein was conducted in accordance with generally accepted professional engineering and geologic practice. No other warranty exists, either expressed or implied.

In addition to data collected and observations made by Haley & Aldrich personnel, this report incorporates Site conditions observed and described by others as reported in records available to Haley & Aldrich as of the date of report preparation. Haley & Aldrich relied—in part—on such data collected by others in the development of interpretations about environmental conditions at the Facility. The accuracy, precision, or representative nature of data originally generated by others could not be independently verified by Haley & Aldrich, and would be beyond the scope of this project.

In addition, the passage of time may result in changes in Site conditions, technology, or economic conditions which could alter the findings and/or recommendations of the report.

APPENDIX B

Soil Confirmation Samples – Laboratory Data

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/21/2004	Chain of Custody Number: 141805
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: ~~E4~~A21022	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): C6 PARCEL A EXC.	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: ~~Unpres~~ 4oz JAR	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): ARSENIC	Special Instructions/ Conditions of Receipt
CSAØ53_SSFØ8_ØØ13	1/21/04	8:15				X	1						X	24 HR TAT
CSAØ44_SSEWØ2_ØØ12	1/21/04	9:00				X	1						X	24 HR TAT
CSAØ45_SSFØ5_ØØ12	1/21/04	9:15				X	1						X	24 HR TAT
~~CSAØ46~~ (TSH)														
CSAØ52_SSWWØ2_ØØ12	1/21/04	9:30				X	1						X	24 HR TAT
TB_HAØ121Ø4_ØØØ1	1/21/04			X						3				HOLD
CSAØ53_SSWWØ2_ØØ19	1/21/04	9:45				X	1						X	24HR TAT
CSAØ54_SSWWØ2_ØØ2Ø	1/21/04	10:00				X	1						X	HOLD

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 1/21/04	Time: 10:00	1. Received By: [signature]	Date: 1-21-04	Time: 10:00
2. Relinquished By: [signature]	Date: 1-21-04	Time: 10:40	2. Received By: [signature]	Date: 01/21/04	Time: 1040
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: Temp = 4.0

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009005

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 01/21/04

LIMS Lot #: EA210222 Quote #: 42295

Client Name: Haley & Aldrich Project: BOEING C6

Received by: AB Date/Time Received: 01/21/04 @ 1040

Delivered by : ☐ Client ☑ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☐ Other

****

Initial / Date

Custody Seal Status Cooler: ☐ Intact ☐ Broken ☑ None ..... AB 01/21/04

Custody Seal Status Samples: ☐ Intact ☐ Broken ☑ None .....

Custody Seal #(s): ☑ No Seal #.....

Sampler Signature on COC ☐ Yes ☐ No ☑ N/A...

IR Gun # A Correction Factor 0 °C IR passed daily verification ☑ Yes ☐ No .....

Temperature - **BLANK** ____ °C +/- 0 CF = 4.0 °C .....

Temperature – **COOLER** (____ °C ____ °C ____ °C ____ °C) = ____ avg °C +/- 0 CF = ____ °C... N/A

Samples outside temperature criteria but received within 6 hours of final sampling ☐ Yes ☑ N/A...

Sample Container(s): ☑ STL-LA ☐ Client .....

One COC/Multiple coolers: ☐ Yes- # coolers ____ All within temp criteria ☐ Yes ☐ No ☑ N/A....

One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☑ N/A ...

Samples: ☑ Intact ☐ Broken ☐ Other ....

pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☑ N/A..

Anomalies: ☑ No ☐ Yes – complete CUR and Create NCM NCM # ____ .....

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☑ Yes ☐ N/A....

Labeled by: AB Labeling checked ..... AB .....

****

Turn Around Time: ☑ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☐ NORMAL .....

Short-Hold Notification: ☐ pH ☐ Wet Chem ☐ Metals (Filter/Pres) ☐ Encore ☑ >1/2 HT expired... N/A

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____ .....

_____ .....

_____ .....

********** LEAVE NO BLANK SPACES ; USE N/A **********

Headspace Anomaly ☑ N/A AB 01/21/04

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # ~~EAA~~210222

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1-4	5	6,7											
VOAH/ *		3												
10gCJ	1		1											

* VOA with headspace/bubbles

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☐ N/A AB 01/21/04

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **CONTAINER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis
  - ☐ Other

Comments:

01/21/04 ID CHANGE PER TRAVIS HARWOOD
CSA053 → CSA055

☐ Corrective Action Implemented:

☐ Client Informed: verbally on _____ By: _____ ☐ In writing on _____ By: _____

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date:	Log Review/Date:	PM Review/Date:
AB 01/21/04	1-21-04	01-21-04

EXECUTIVE SUMMARY - Detection Highlights

E4A210222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA053_SSF08_0013 01/21/04 08:15 001				
Arsenic	4.4	1.0	mg/kg	SW846 6010B
CSA044_SSEW02_0012 01/21/04 09:00 002				
Arsenic	15.8	1.0	mg/kg	SW846 6010B
CSA045_SSF05_0012 01/21/04 09:15 003				
Arsenic	3.9	1.0	mg/kg	SW846 6010B
CSA052_SSWW02_0012 01/21/04 09:30 004				
Arsenic	2.6	1.0	mg/kg	SW846 6010B
CSA055_SSWW02_0019 01/21/04 09:45 006				
Arsenic	13.0	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A210222

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A210222

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F8A5D	001	CSA053_SSF08_0013	01/21/04	08:15
F8A5L	002	CSA044_SSEW02_0012	01/21/04	09:00
F8A5M	003	CSA045_SSF05_0012	01/21/04	09:15
F8A5P	004	CSA052_SSWW02_0012	01/21/04	09:30
F8A51	006	CSA055_SSWW02_0019	01/21/04	09:45

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA053_SSF08_0013

TOTAL Metals

Lot-Sample #...: E4A210222-001 **Matrix.....:** SOLID
Date Sampled...: 01/21/04 08:15 **Date Received..:** 01/21/04 10:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021361						
Arsenic	**4.4**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21/04**	**F8A5D1AA**
		Dilution Factor: 1		Analysis Time..: 16:12	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021157	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA044_SSEW02_0012

TOTAL Metals

Lot-Sample #...: E4A210222-002 **Matrix.....:** SOLID
Date Sampled...: 01/21/04 09:00 **Date Received..:** 01/21/04 10:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021361						
Arsenic	**15.8**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21/04**	**F8A5L1AA**
		Dilution Factor: 1		Analysis Time..: 16:42	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021157	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA045_SSF05_0012

TOTAL Metals

Lot-Sample #...: E4A210222-003 **Matrix.....:** SOLID
Date Sampled...: 01/21/04 09:15 **Date Received..:** 01/21/04 10:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021361						
Arsenic	**3.9**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21/04**	**F8A5M1AA**
		Dilution Factor: 1		Analysis Time..: 16:50	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021157	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA052_SSWW02_0012

TOTAL Metals

Lot-Sample #...: E4A210222-004 **Matrix.....:** SOLID
Date Sampled...: 01/21/04 09:30 **Date Received..:** 01/21/04 10:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021361						
Arsenic	**2.6**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21/04**	**F8A5P1AA**
		Dilution Factor: 1		Analysis Time..: 16:57	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021157	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA055_SSWW02_0019

TOTAL Metals

Lot-Sample #...: E4A210222-006 **Matrix.....:** SOLID
Date Sampled...: 01/21/04 09:45 **Date Received..:** 01/21/04 10:40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021361						
Arsenic	**13.0**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21/04**	**F8A511AA**
		Dilution Factor: 1		Analysis Time..: 17:05	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021157	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A210222

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6010B		4021361	4021157
002	SOLID	SW846 6010B		4021361	4021157
003	SOLID	SW846 6010B		4021361	4021157
004	SOLID	SW846 6010B		4021361	4021157
006	SOLID	SW846 6010B		4021361	4021157

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A210222 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A210000-361 **Prep Batch #...:** 4021361						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/21/04	F8CA91AA

Dilution Factor: 1

Analysis Time..: 15:59 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A210222 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A210000-361 **Prep Batch #...:** 4021361					
Arsenic	98	(75 - 115)	SW846 6010B	01/21/04	F8CA91AC
		Dilution Factor: 1	Analysis Time..: 16:04		Analyst ID.....: 021088
		Instrument ID..: M01			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A210222 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A210000-361 **Prep Batch #...:** 4021361							
Arsenic	200	195	mg/kg	98	SW846 6010B	01/21/04	F8CA91AC

Dilution Factor: 1 Analysis Time..: 16:04 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A210222 **Matrix.....:** SOLID
Date Sampled...: 01/21/04 08:15 **Date Received..:** 01/21/04 10:40

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A210222-001 **Prep Batch #...:** 4021361							
Arsenic	95	(75 - 115)			SW846 6010B	01/21/04	F8A5D1AC
	94	(75 - 115)	1.1	(0-25)	SW846 6010B	01/21/04	F8A5D1AD

Dilution Factor: 1
Analysis Time..: 16:27 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4021157

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A210222 **Matrix.....:** SOLID
Date Sampled...: 01/21/04 08:15 **Date Received..:** 01/21/04 10:40

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A210222-001 **Prep Batch #...:** 4021361									
Arsenic									
	4.4	200	195	mg/kg	95		SW846 6010B	01/21/04	F8A5D1AC
	4.4	200	193	mg/kg	94	1.1	SW846 6010B	01/21/04	F8A5D1AD

Dilution Factor: 1
Analysis Time..: 16:27 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4021157

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/20/04	Chain of Custody Number: 141802
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619 - 280 - 9210	Lab Number: E4A210283	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): C6 PARCEL A EXC.	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882 - 403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): ARSENIC	Special Instructions/ Conditions of Receipt
CSA049_SSWW02_0016 (TSH)	1/20/04	15:45				X	1						X	~~[illegible]~~ HOLD (TSH)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other HOLD

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 1/20/04	Time: 16:35	1. Received By: [signature]	Date: 1-20-04	Time: 16:55
2. Relinquished By: [signature]	Date: 1-20-04	Time: 18:15	2. Received By: Terry Smart	Date: 1-21-04	Time: 1000
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009022

EXECUTIVE SUMMARY - Detection Highlights

E4A210283

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA049_SSWW02_0016 01/20/04 15:45 001				
Arsenic	10	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A210283

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A210283

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F8CL1	001	CSA049_SSWW02_0016	01/20/04	15:45

NOTE(S):

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- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA049_SSWW02_0016

TOTAL Metals

Lot-Sample #...: E4A210283-001 **Matrix.....:** SO
Date Sampled...: 01/20/04 15:45 **Date Received..:** 01/21/04 10:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021475						
Arsenic	**10**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21/04**	**F8CL11AA**
		Dilution Factor: 1		Analysis Time..: 19:11	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021224	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A210283

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SO	SW846 6010B		4021475	4021224

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A210283 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A210000-475 **Prep Batch #...:** 4021475						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/21/04	F8CPJ1AA

Dilution Factor: 1

Analysis Time..: 18:58 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A210283 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A210000-475 **Prep Batch #...:** 4021475					
Arsenic	95	(75 - 115)	SW846 6010B	01/21/04	F8CPJ1AC
		Dilution Factor: 1	Analysis Time..: 19:04	Analyst ID.....: 021088	
		Instrument ID..: M01			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A210283 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A210000-475 **Prep Batch #...:** 4021475							
Arsenic	200	191	mg/kg	95	SW846 6010B	01/21/04	F8CPJ1AC

Dilution Factor: 1 Analysis Time..: 19:04 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A210283 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 15:50 **Date Received..:** 01/21/04 10:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A210288-001 **Prep Batch #...:** 4021475							
Arsenic	91	(75 - 115)			SW846 6010B	01/21/04	F8CMW1AC
	92	(75 - 115)	1.2	(0-25)	SW846 6010B	01/21/04	F8CMW1AD

Dilution Factor: 1
Analysis Time..: 19:35 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4021224

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A210283 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 15:50 **Date Received..:** 01/21/04 10:00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A210288-001 **Prep Batch #...:** 4021475									
Arsenic									
	13.2	200	195	mg/kg	91		SW846 6010B	01/21/04	F8CMW1AC
	13.2	200	197	mg/kg	92	1.2	SW846 6010B	01/21/04	F8CMW1AD

Dilution Factor: 1
Analysis Time..: 19:35 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4021224

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/20/04	Chain of Custody Number: 141803
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: E4A210288	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: A SUZUKI	
Project Name and Location (State): C6 PARCEL A EXC.	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): Arsenic											Special Instructions/ Conditions of Receipt
CSA050-SSWW02-0017	1/20/04	15:50				X		1							X											HOLD

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other HOLD

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/20/04	16:35	1. Received By: [signature]	1-20-04	16:35
2. Relinquished By: [signature]	1-20-04	18:15	2. Received By: [signature]	1-21-04	1000
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009033

EXECUTIVE SUMMARY - Detection Highlights

E4A210288

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA050_SSWW02_0017 01/20/04 15:50 001				
Arsenic	13.2	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A210288

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A210288

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F8CMW	001	CSA050_SSWW02_0017	01/20/04	15:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA050_SSWW02_0017

TOTAL Metals

Lot-Sample #...: E4A210288-001 **Matrix.....:** SO
Date Sampled...: 01/20/04 15:50 **Date Received..:** 01/21/04 10:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021475						
Arsenic	**13.2**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21/04**	**F8CMW1AA**
		Dilution Factor: 1		Analysis Time..: 19:18	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021224	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A210288

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SO	SW846 6010B		4021475	4021224

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A210288 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A210000-475 **Prep Batch #...:** 4021475						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/21/04	F8CPJ1AA

Dilution Factor: 1

Analysis Time..: 18:58 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A210288 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A210000-475 **Prep Batch #...:** 4021475					
Arsenic	95	(75 - 115)	SW846 6010B	01/21/04	F8CPJ1AC
		Dilution Factor: 1	Analysis Time..: 19:04	Analyst ID.....: 021088	
		Instrument ID..: M01			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A210288 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A210000-475 **Prep Batch #...:** 4021475							
Arsenic	200	191	mg/kg	95	SW846 6010B	01/21/04	F8CPJ1AC

Dilution Factor: 1 Analysis Time..: 19:04 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A210288 **Matrix.....:** SO
Date Sampled...: 01/20/04 15:50 **Date Received..:** 01/21/04 10:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A210288-001 **Prep Batch #...:** 4021475							
Arsenic	91	(75 - 115)			SW846 6010B	01/21/04	F8CMW1AC
	92	(75 - 115)	1.2	(0-25)	SW846 6010B	01/21/04	F8CMW1AD

Dilution Factor: 1
Analysis Time..: 19:35 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4021224

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A210288 **Matrix.....:** SO
Date Sampled...: 01/20/04 15:50 **Date Received..:** 01/21/04 10:00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A210288-001 **Prep Batch #...:** 4021475									
Arsenic									
	13.2	200	195	mg/kg	91		SW846 6010B	01/21/04	F8CMW1AC
	13.2	200	197	mg/kg	92	1.2	SW846 6010B	01/21/04	F8CMW1AD

Dilution Factor: 1
Analysis Time..: 19:35 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4021224

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/21/04	Chain of Custody Number: 141806
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: E4A210330	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): C6 PARCEL A	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: ~~Unpres.~~ 4oz JAR	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): ARSENIC											Special Instructions/ Conditions of Receipt
TB_HA Ø121Ø4_ØØØ2	1/21/04	—		X							3															HOLD
CSAØ56_SSEWØ2_ØØ13	1/21/04	12:00				X		1							X											24 HR TAT
CSAØ57_SSEWØ2_ØØ14	1/21/04	12:15				X		1																		HOLD
CSAØ58_SSEWØ2_ØØ15	1/21/04	12:30				X		1							X											24 HR TAT
CSAØ59_SSEWØ2_ØØ16	1/21/04	12:45				X		1																		HOLD
CSAØ6Ø_SSWWØ2_ØØ21	1/21/04	14:45				X		1																		HOLD
CSAØ61_SSWWØ2_ØØ22	1/21/04	15:15				X		1																		HOLD

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/21/04	13:25	1. Received By: Terry Swart	1-21-04	1825
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009044

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 1-21-04

LIMS Lot #: EYA 210330 Quote #: 42295

Client Name: H&A Project: C6

Received by: RS Date/Time Received: 1-21-04

Delivered by : ☒ Client ☐ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☐ Other _____

	Initial / Date
Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None	RS 1-21-04
Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None	
Custody Seal #(s): _____ ☒ No Seal #	
Sampler Signature on COC ☐ Yes ☒ No ☐ N/A	
IR Gun # A Correction Factor 0 °C IR passed daily verification ☒ Yes ☐ No	
Temperature - BLANK 14.2 °C +/- 0 CF = 14.2 °C	
Temperature – COOLER (___ °C ___ °C ___ °C ___ °C) = ___ avg °C +/- 0 CF = ___ °C	N/A
Samples outside temperature criteria but received within 6 hours of final sampling ☒ Yes ☐ N/A	
Sample Container(s): ☒ STL-LA ☐ Client	
One COC/Multiple coolers: ☐ Yes- # coolers ___ All within temp criteria ☐ Yes ☐ No ☒ N/A	
One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☒ N/A	
Samples: ☒ Intact ☐ Broken ☐ Other _____	
pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☒ N/A	
Anomalies: ☒ No ☐ Yes – complete CUR and Create NCM NCM # _____	
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☒ Yes ☐ N/A	
Labeled by: _____ Labeling checked	

Turn Around Time: ☒ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☐ NORMAL

Short-Hold Notification: ☐ pH ☐ Wet Chem ☐ Metals (Filter/Pres) ☐ Encore ☐ >1/2 HT expired...

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____

_____

_____

********** LEAVE NO BLANK SPACES ; USE N/A **********

Headspace Anomaly ☒ N/A

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # EUA 210330

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1	2-7												
VOAH/ *	3													
4oz CGJ		1												

* VOA with headspace/bubbles

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore
AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☒ N/A _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **CONTAINER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis ☐ Other

Comments:

_____

_____

_____

_____

_____

☐ Corrective Action Implemented:

☐ Client Informed: verbally on _____ By: _____ ☐ In writing on _____ By: _____

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date:	Log Review/Date:	PM Review/Date:
Swan 1-21-04		01-21-04

EXECUTIVE SUMMARY - Detection Highlights

E4A210330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA056_SSEW02_0013 01/21/04 12:00 002				
Arsenic	8.2	1.0	mg/kg	SW846 6010B
CSA058_SSEW02_0015 01/21/04 12:30 004				
Arsenic	6.1	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A210330

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A210330

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F8C3E	002	CSA056_SSEW02_0013	01/21/04	12:00
F8C3J	004	CSA058_SSEW02_0015	01/21/04	12:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA056_SSEW02_0013

TOTAL Metals

Lot-Sample #...: E4A210330-002 **Matrix.....:** SO
Date Sampled...: 01/21/04 12:00 **Date Received..:** 01/21/04 18:25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021564						
Arsenic	**8.2**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21-01/22/04**	**F8C3E1AA**
		Dilution Factor: 1		Analysis Time..: 12:01	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021287	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA058_SSEW02_0015

TOTAL Metals

Lot-Sample #...: E4A210330-004 **Matrix.....:** SO
Date Sampled...: 01/21/04 12:30 **Date Received..:** 01/21/04 18:25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4021564						
Arsenic	**6.1**	**1.0**	**mg/kg**	**SW846 6010B**	**01/21-01/22/04**	**F8C3J1AA**
		Dilution Factor: 1		Analysis Time..: 12:31	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4021287	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A210330

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
002	SO	SW846 6010B		4021564	4021287
004	SO	SW846 6010B		4021564	4021287

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A210330 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A210000-564 **Prep Batch #...:** 4021564						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/21-01/22/04	F8C341AA

Dilution Factor: 1

Analysis Time..: 11:46 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A210330 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A210000-564 **Prep Batch #...:** 4021564					
Arsenic	97	(75 - 115)	SW846 6010B	01/21-01/22/04	F8C341AC

Dilution Factor: 1 Analysis Time..: 11:54 Analyst ID.....: 021088
Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A210330 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A210000-564 **Prep Batch #...:** 4021564							
Arsenic	200	193	mg/kg	97	SW846 6010B	01/21-01/22/04	F8C341AC

Dilution Factor: 1 Analysis Time..: 11:54 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A210330 **Matrix.....:** SO
Date Sampled...: 01/21/04 12:00 **Date Received..:** 01/21/04 18:25

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A210330-002 **Prep Batch #...:** 4021564							
Arsenic	89	(75 - 115)			SW846 6010B	01/21-01/22/04	F8C3E1AC
	85	(75 - 115)	4.4	(0-25)	SW846 6010B	01/21-01/22/04	F8C3E1AD

Dilution Factor: 1
Analysis Time..: 12:16 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4021287

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A210330 **Matrix.....:** SO
Date Sampled...: 01/21/04 12:00 **Date Received..:** 01/21/04 18:25

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A210330-002 **Prep Batch #...:** 4021564									
Arsenic									
	8.2	200	187	mg/kg	89		SW846 6010B	01/21-01/22/04	F8C3E1AC
	8.2	200	179	mg/kg	85	4.4	SW846 6010B	01/21-01/22/04	F8C3E1AD

Dilution Factor: 1
Analysis Time..: 12:16 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4021287

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/15/2004	Chain of Custody Number: 142194
Address: 9040 FRIARS RD	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: ~~FA~~ 150899	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): C6 - PARCEL A	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	#	Analysis (Attach list if more space is needed): ARSENIC	Special Instructions/ Conditions of Receipt
CSAØØ1_SSSWØ2_ØØØ1	1/15/04	12:00				X	X						1	X	24 HR TAT
CSAØØ2_SSSWØ2_ØØØ2	↓	12:15				↓	↓						↓		HOLD
CSAØØ3_SSSWØ2_ØØØ3		12:30													↓
CSAØØ4_SSSWØ2_ØØØ4		12:40													
CSAØØ5_SSSWØ2_ØØØ5		12:50													
CSAØØ6_SSNWØ2_ØØØ1		13:05												X	TSH 24HR
CSAØØ7_SSNWØ2_ØØØ2		13:15													HOLD
CSAØØ8_SSNWØ2_ØØØ3		13:20													↓
CSAØØ9_SSNWØ2_ØØØ4		13:25													
CSAØ1Ø_SSNWØ2_ØØØ5		13:30													↓
CSAØ11_SSEWØ2_ØØØ1		13:35												X	24 HR
CSAØ12_SSEWØ2_ØØØ2	↓	13:40				↓	↓						↓	X	24 HR

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 1/15/04	Time: 13:50	1. Received By: [signature]	Date: 1/15/04	Time: 1350
2. Relinquished By: [signature]	Date: 1/15/04	Time: 1445	2. Received By: [signature]	Date: 1/15/04	Time: 1445
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009058

STL – LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 1/15/04

Quantims Lot #: ~~TAA~~-150397 Quote#: 042295
Client Name: H+A Project: BOEING-C6
Received by: TA Date/Time Received: 1/15/04 1445
Delivered by : ☐Client ☐Airborne ☐Fed Ex ☐DHL ☐Ultra-Ex ☐Rey B.
☐UPS ☐DES ☑Other Courier.

Initial / Date

Custody Seal Status: ☐Intact ☐Broken ☑None ..... TA 1/15/04
Custody Seal #(s): ☑No Seal #
Sample Container(s): ☐STL-LA ☑Client ☐N/A .....
Temperature(s) (COOLER/BLANK) in °C: 5.7 Correction Factor: 0 (Corrected TEMP) 5.7
Thermometer Used : ☒IR (Infra-red) ID: A ☐Digital (Probe) .....
Samples: ☑Intact ☐Broken Other .....
Anomalies: ☑No ☐Yes (See Clouseau) .....
Labeled by ..... AB 1/15/04
Labeling checked by .....

Turn Around Time: ☑RUSH–24HR ☐RUSH–48HR ☐RUSH–72HR ☐NORMAL .....
Short-Hold Notification: ☐Ph ☐Wet Chem ☐Metals (Filter/Pres) ☐Encore ☑N/A ...
Outside Analysis(es) (Test/Lab/Date Sent Out) :

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1	2	3	4	5	6	7	8	9	10	PH
VOAh /*											N/A
4gCGJ	1	1	1	1	1	1	1	1	1	1	

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve

*** Number of VOA's w/ Headspace present**

LOGGED BY/DATE: AB 01/15/04 REVIEWED BY/DATE: 1/15/04

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Version 12/18/00

STL – LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 1/15/04

Quantims Lot #: E4A152389 Quote#: 042295
Client Name: H+A Project: BOEING C6
Received by: PA Date/Time Received: 1/15/04 1445
Delivered by : ☐Client ☐Airborne ☐Fed Ex ☐DHL ☐Ultra-Ex ☐Rey B.
☐UPS ☐DES ☑Other Courier.

Initial / Date

Custody Seal Status: ☐Intact ☐Broken ☑None ..... PA 1/15/04
Custody Seal #(s): ☑No Seal #
Sample Container(s): ☐STL-LA ☑Client ☐N/A .....
Temperature(s) (COOLER/BLANK) in °C: 5.7 Correction Factor: 0 (Corrected TEMP) 5.7
Thermometer Used : ☒IR (Infra-red) ID: A ☐Digital (Probe) .....
Samples: ☑Intact ☐Broken Other .....
Anomalies: ☑No ☐Yes (See Clouseau) .....
Labeled by ..... MM 01/15/04
Labeling checked by .....

Turn Around Time: ☑RUSH–24HR ☐RUSH–48HR ☐RUSH–72HR ☐NORMAL .....
Short-Hold Notification: ☐Ph ☐Wet Chem ☐Metals (Filter/Pres) ☐Encore ☑N/A ...
Outside Analysis(es) (Test/Lab/Date Sent Out) :

..... LEAVE NO BLANK SPACES ; USE N/A .....

Fraction	11	12									PH
VOAh /*											N/A
4gCGJ	1	1									

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve

*** Number of VOA's w/ Headspace present**

LOGGED BY/DATE: MM 01/15/04 REVIEWED BY/DATE: PA 1/15/04

G:\FORMS\Sample Rec\Project Receipt Checklist 6.doc
Version 12/18/00

EXECUTIVE SUMMARY - Detection Highlights

E4A150399

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA001_SSSW02_0001 01/15/04 12:00 001				
Arsenic	2.7	1.0	mg/kg	SW846 6010B
CSA006_SSNW02_0001 01/15/04 13:05 006				
Arsenic	4.6	1.0	mg/kg	SW846 6010B
CSA011_SSEW02_0001 01/15/04 13:35 011				
Arsenic	11.9	1.0	mg/kg	SW846 6010B
CSA012_SSEW02_0002 01/15/04 13:40 012				
Arsenic	5.5	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A150399

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A150399

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F74D5	001	CSA001_SSSW02_0001	01/15/04	12:00
F74EH	006	CSA006_SSNW02_0001	01/15/04	13:05
F74EW	011	CSA011_SSEW02_0001	01/15/04	13:35
F74EX	012	CSA012_SSEW02_0002	01/15/04	13:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA001_SSSW02_0001

TOTAL Metals

Lot-Sample #...: E4A150399-001 **Matrix.....:** SOLID
Date Sampled...: 01/15/04 12:00 **Date Received..:** 01/15/04 14:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4015488						
Arsenic	**2.7**	**1.0**	**mg/kg**	**SW846 6010B**	**01/15-01/16/04**	**F74D51AA**
		Dilution Factor: 1		Analysis Time..: 13:00	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4015243	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA006_SSNW02_0001

TOTAL Metals

Lot-Sample #...: E4A150399-006 **Matrix.....:** SOLID
Date Sampled...: 01/15/04 13:05 **Date Received..:** 01/15/04 14:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4015488						
Arsenic	**4.6**	**1.0**	**mg/kg**	**SW846 6010B**	**01/15-01/16/04**	**F74EH1AA**
		Dilution Factor: 1		Analysis Time..: 13:58	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4015243	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA011_SSEW02_0001

TOTAL Metals

Lot-Sample #...: E4A150399-011 **Matrix.....:** SOLID
Date Sampled...: 01/15/04 13:35 **Date Received..:** 01/15/04 14:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4015488						
Arsenic	**11.9**	**1.0**	**mg/kg**	**SW846 6010B**	**01/15-01/16/04**	**F74EW1AA**
		Dilution Factor: 1		Analysis Time..: 14:06	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4015243	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA012_SSEW02_0002

TOTAL Metals

Lot-Sample #...: E4A150399-012 **Matrix.....:** SOLID
Date Sampled...: 01/15/04 13:40 **Date Received..:** 01/15/04 14:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4015488						
Arsenic	**5.5**	**1.0**	**mg/kg**	**SW846 6010B**	**01/15-01/16/04**	**F74EX1AA**
		Dilution Factor: 1		Analysis Time..: 14:13	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4015243	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A150399

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6010B		4015488	4015243
006	SOLID	SW846 6010B		4015488	4015243
011	SOLID	SW846 6010B		4015488	4015243
012	SOLID	SW846 6010B		4015488	4015243

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A150399 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A150000-488 **Prep Batch #...:** 4015488						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/15-01/16/04	F74GE1AA

Dilution Factor: 1

Analysis Time..: 12:47 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A150399 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A150000-488 **Prep Batch #...:** 4015488					
Arsenic	109	(75 - 115)	SW846 6010B	01/15-01/16/04	F74GE1AC

Dilution Factor: 1 Analysis Time..: 12:53 Analyst ID.....: 021088
Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A150399 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A150000-488 **Prep Batch #...:** 4015488							
Arsenic	200	219	mg/kg	109	SW846 6010B	01/15-01/16/04	F74GE1AC

Dilution Factor: 1 Analysis Time..: 12:53 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A150399 **Matrix.....:** SOLID
Date Sampled...: 01/15/04 12:00 **Date Received..:** 01/15/04 14:45

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A150399-001 **Prep Batch #...:** 4015488							
Arsenic	102	(75 - 115)			SW846 6010B	01/15-01/16/04	F74D51AC
	102	(75 - 115)	0.09	(0-25)	SW846 6010B	01/15-01/16/04	F74D51AD

Dilution Factor: 1
Analysis Time..: 13:13 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4015243

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A150399 **Matrix.....:** SOLID
Date Sampled...: 01/15/04 12:00 **Date Received..:** 01/15/04 14:45

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A150399-001 **Prep Batch #...:** 4015488									
Arsenic									
	2.7	200	206	mg/kg	102		SW846 6010B	01/15-01/16/04	F74D51AC
	2.7	200	206	mg/kg	102	0.09	SW846 6010B	01/15-01/16/04	F74D51AD

Dilution Factor: 1
Analysis Time..: 13:13 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4015243

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: Boeing Realty Corp / HHA	Project Manager: Scott Zachary	Date: 1-22-04	Chain of Custody Number: 141807
Address: 9840 Friars Rd	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: E4A220341	Page 1 of 1
City: SD; State: CA; Zip Code: 92108	Site Contact: Brooks Pauly; Lab Contact: Diane Suzuki		
Project Name and Location (State): C-6 Parcel A Exc.	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 2B82-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): Total Arsenic	Special Instructions/ Conditions of Receipt
CSA_062_SSEW02_0017	1-22-04	13:30				X	X						X	TAT-24hr
CSA-063-SSEW02-0018	1-22-04	13:40				X	X						X	Hold
TB_HA012204_0001	1-22-04	—		X						X				Hold

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1-22-04	17:00	1. Received By: [signature]	1-22-04	17:00
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009074

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 1-22-04

LIMS Lot #: E4A220341 Quote #: 42295

Client Name: HA Project: C6

Received by: MG Date/Time Received: 1-22-04 1700

Delivered by : ☒ Client ☐ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☐ Other _____

Initial / Date

Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None 1-22-04

Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None .....

Custody Seal #(s): _____ ☒ No Seal # .....

Sampler Signature on COC ☐ Yes ☐ No ☒ N/A...

IR Gun # A Correction Factor 0 °C IR passed daily verification ☒ Yes ☐ No .....

Temperature - BLANK ____ °C +/- 0 CF = ____ °C .....

Temperature – COOLER (2 °C ____ °C ____ °C ____ °C) = ____ avg °C +/- 0 CF = 2 °C.....

Samples outside temperature criteria but received within 6 hours of final sampling ☒ Yes ☐ N/A...

Sample Container(s): ☒ STL-LA ☐ Client .....

One COC/Multiple coolers: ☐ Yes- # coolers ____ All within temp criteria ☐ Yes ☐ No ☒ N/A....

One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☒ N/A ...

Samples: ☒ Intact ☐ Broken ☐ Other _____ .....

pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☒ N/A..

Anomalies: ☒ No ☒ Yes – complete CUR and Create NCM NCM # _____ .....

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☐ Yes ☒ N/A....

Labeled by: _____ Labeling checked .....

Turn Around Time: ☒ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☐ NORMAL .....

Short-Hold Notification: ☐ pH ☐ Wet Chem ☐ Metals (Filter/Pres) ☐ Encore ☐ >1/2 HT expired...

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____ .....

_____ .....

_____ .....

********** LEAVE NO BLANK SPACES ; USE N/A **********

Headspace Anomaly ☒ N/A 1-22-04

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # E4A220341

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1	2	3											
VOAH/ *			3											
4oz GJ	1	1												

* VOA with headspace/bubbles

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☐ N/A 1-22-04

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **CONTAINER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis
  - ☐ Other

Comments:

TB on COC but not received.

01/23/04 – sample (TB) was received per TSwart

☐ Corrective Action Implemented:

☑ Client Informed: verbally on 01/22/04 + 01/23/04 By: phone ☐ In writing on 01/23/04 By: email/~~phone~~

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date:	Log Review/Date:	PM Review/Date:
TSwart	1/22/04	01/23/04

EXECUTIVE SUMMARY - Detection Highlights

E4A220341

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA_062_SSEW02_0017 01/22/04 13:30 001				
Arsenic	7.4	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A220341

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A220341

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F8E5J	001	CSA_062_SSEW02_0017	01/22/04	13:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA_062_SSEW02_0017

TOTAL Metals

Lot-Sample #...: E4A220341-001 **Matrix.....:** SO
Date Sampled...: 01/22/04 13:30 **Date Received..:** 01/22/04 17:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4023194						
Arsenic	**7.4**	**1.0**	**mg/kg**	**SW846 6010B**	**01/22-01/23/04**	**F8E5J1AA**
		Dilution Factor: 1		Analysis Time..: 12:45	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4023075	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A220341

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SO	SW846 6010B		4023194	4023075

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A220341 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A230000-194 **Prep Batch #...:** 4023194						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/22-01/23/04	F8FGA1AA

Dilution Factor: 1

Analysis Time..: 12:32 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A220341 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A230000-194 **Prep Batch #...:** 4023194					
Arsenic	101	(75 - 115)	SW846 6010B	01/22-01/23/04	F8FGA1AC

Dilution Factor: 1 Analysis Time..: 12:38 Analyst ID.....: 021088
Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A220341 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A230000-194 **Prep Batch #...:** 4023194							
Arsenic	200	203	mg/kg	101	SW846 6010B	01/22-01/23/04	F8FGA1AC

Dilution Factor: 1 Analysis Time..: 12:38 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A220341 **Matrix.....:** SO
Date Sampled...: 01/22/04 13:30 **Date Received..:** 01/22/04 17:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A220341-001 **Prep Batch #...:** 4023194							
Arsenic	0	(75 - 115)			SW846 6010B	01/22-	F8E5J1AC
		(75 - 115)		(0-25)	SW846 6010B	01/22-	F8E5J1AD

Dilution Factor: 1
Analysis Time..: 00:00 Instrument ID..: NO INST Analyst ID.....:
MS Run #.....: 4023075

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A220341 **Matrix.....:** SO
Date Sampled...: 01/22/04 13:30 **Date Received..:** 01/22/04 17:00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A220341-001 **Prep Batch #...:** 4023194									
Arsenic									
	7.4	200		mg/kg	0		SW846 6010B	01/22-	F8E5J1AC
	7.4	200		mg/kg			SW846 6010B	01/22-	F8E5J1AD

Dilution Factor: 1
Analysis Time..: 00:00 Instrument ID..: NO INST Analyst ID.....:
MS Run #.....: 4023075

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/16/04	Chain of Custody Number: 142197
Address: 9040 FRIARS RD SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: ~~F4A160286~~	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): C6 PARCEL A	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: ~~Unpres.~~ 402	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): ARSENIC	Special Instructions/ Conditions of Receipt
CSAØ13-SSEWØ2-ØØØ3	1/16/04	10:30				X		1							X	24 HR TAT

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 1/16/04	Time: 12:30	1. Received By: [signature]	Date: 1/16/04	Time: 1230
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009087

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 01/16/04

LIMS Lot #: ~~EA~~ 160286 Quote #: 42295

Client Name: H & A Project: Boeing C6 Torrance

Received by: AB Date/Time Received: 01/16/04 @ 1230

Delivered by : ☑ Client ☐ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☐ Other _____

	Initial / Date
Custody Seal Status Cooler: ☐ Intact ☐ Broken ☑ None	AB 01/16/04
Custody Seal Status Samples: ☐ Intact ☐ Broken ☑ None	
Custody Seal #(s): _____ ☐ No Seal #	
Sampler Signature on COC ☐ Yes ☐ No ☑ N/A	
IR Gun # A Correction Factor 0 °C IR passed daily verification ☐ Yes ☐ No	
Temperature - BLANK 13.3 °C +/- 0 CF = 13.3 °C	AB 01/16/04
Temperature – COOLER (___ °C ___ °C ___ °C ___ °C) = ___ avg °C +/- 0 CF = ___ °C	
Samples outside temperature criteria but received within 6 hours of final sampling ☑ Yes ☐ N/A	
Sample Container(s): ☑ STL-LA ☐ Client	
One COC/Multiple coolers: ☐ Yes- # coolers ___ All within temp criteria ☐ Yes ☐ No ☑ N/A	
One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☑ N/A	
Samples: ☑ Intact ☐ Broken ☐ Other _____	
pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☑ N/A	
Anomalies: ☒ No (P) ☐ Yes – complete CUR and Create NCM NCM # 05-07290	
Complete shipment received in good condition with correct temperatures, containers, labels, volumes (P) preservatives and within method specified holding times. ☐ Yes (P) ☒ N/A	
Labeled by: _____ Labeling checked	

Turn Around Time: ☑ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☐ NORMAL AB 01/16/04

Short-Hold Notification: ☐ pH ☐ Wet Chem ☐ Metals (Filter/Pres) ☐ Encore ☐ >1/2 HT expired…

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____

_____

_____

********** LEAVE NO BLANK SPACES ; USE N/A **********

Headspace Anomaly ☐ N/A

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # FFA16 0286

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1													
VOAH/ *														
4BGJ	1													

* VOA with headspace/bubbles

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore
AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☐ N/A _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **CONTAINER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis
  - ☐ Other

Comments:

_____

_____

_____

_____

_____

☐ Corrective Action Implemented:

☐ Client Informed: verbally on _____ By: _____ ☐ In writing on _____ By: _____

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date:	Log Review/Date:	PM Review/Date:
AB 01/16/04	1/16/04	01.16.04

EXECUTIVE SUMMARY - Detection Highlights

E4A160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA013_SSEW02_0003 01/16/04 10:30 001				
Arsenic	5.7	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A160286

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A160286

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F753F	001	CSA013_SSEW02_0003	01/16/04	10:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA013_SSEW02_0003

TOTAL Metals

Lot-Sample #...: E4A160286-001 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 10:30 **Date Received..:** 01/16/04 12:30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4016462						
Arsenic	**5.7**	**1.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753F1AA**
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A160286

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6010B		4016462	4016202

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A160286 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A160000-462 **Prep Batch #...:** 4016462						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/16/04	F759D1AC

Dilution Factor: 1

Analysis Time..: 19:10 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A160286 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A160000-462 **Prep Batch #...:** 4016462					
Arsenic	100	(75 - 115)	SW846 6010B	01/16/04	F759D1AW
		Dilution Factor: 1	Analysis Time..: 19:15		Analyst ID.....: 021088
		Instrument ID..: M01			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A160286 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A160000-462 **Prep Batch #...:** 4016462							
Arsenic	200	201	mg/kg	100	SW846 6010B	01/16/04	F759D1AW

Dilution Factor: 1 Analysis Time..: 19:15 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A160286 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A160287-001 **Prep Batch #...:** 4016462							
Arsenic	97	(75 - 115)			SW846 6010B	01/16/04	F753M1A7
	98	(75 - 115)	1.4	(0-25)	SW846 6010B	01/16/04	F753M1A8

Dilution Factor: 1
Analysis Time..: 19:43 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4016202

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A160286 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

MS Lot-Sample #: E4A160287-001 **Prep Batch #...:** 4016462

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic									
	11.5	200	205	mg/kg	97		SW846 6010B	01/16/04	F753M1A7
	11.5	200	208	mg/kg	98	1.4	SW846 6010B	01/16/04	F753M1A8

Dilution Factor: 1
Analysis Time..: 19:43 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4016202

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/19/2004	Chain of Custody Number: 142198
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: ~~E~~4A90145	Page 1 of
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact:	Lab Contact:	
Project Name and Location (State): C6 PARCEL A	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Analysis (Attach list if more space is needed): ARSENIC

Containers & Preservatives: 4oz. JAR

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	~~Vapors~~	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	ARSENIC	Special Instructions/ Conditions of Receipt
CSA014-SSF05-0001	1/19/04	9:45				X	1						X	24 HR TAT
CSA015-SSWW02-0001	1/19/04	12:15				X	1						X	24 HR TAT
CSA016-SSF05-0002	1/19/04	12:30				X	1						X	24 HR TAT
CSA017-SSWW02-0002	1/19/04	12:45				X	1						X	24 HR TAT
CSA018-SSEW02-0004	1/19/04	13:00				X	1						X	24 HR TAT
TB-HA011904-0001	1/19/04	—		X						3				HOLD

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	1/19/04	13:05	1. Received By	1-19-04	13:05
2. Relinquished By	1-19-04	13:45	2. Received By	1-19-04	1345
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009100

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST

Date: 01/19/04

LIMS Lot #: E4A190145 Quote #: _____

Client Name: Haley & Aldrich Project: _____

Received by: KF Date/Time Received: 01/19/04 @

Delivered by : ☐ Client ☑ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☐ Other _____

****

	Initial / Date
Custody Seal Status Cooler: ☐Intact ☐Broken ☑None	AM 01/19/04
Custody Seal Status Samples: ☐Intact ☐Broken ☑None	
Custody Seal #(s): _____ ☐No Seal #	
Sampler Signature on COC ☐ Yes ☐No ☑N/A	
IR Gun # A Correction Factor 0 °C IR passed daily verification ☐ Yes ☑No	
Temperature - BLANK ____°C +/- 0 CF = 3.5 °C	
Temperature – COOLER (____°C ____°C ____°C ____°C) = ____ avg °C +/- 0 CF = ____°C N/A	
Samples outside temperature criteria but received within 6 hours of final sampling ☐ Yes ☑N/A	
Sample Container(s): ☑STL-LA ☐ Client	
One COC/Multiple coolers: ☐ Yes- # coolers ____ All within temp criteria ☐ Yes ☐No ☑N/A	
One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☐N/A	
Samples: ☑Intact ☐Broken ☐Other _____	
pH measured: ☑ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☑N/A	
Anomalies: ☑No ☐Yes – complete CUR and Create NCM NCM # _____	
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☑ Yes ☐ N/A	
Labeled by: _____ Labeling checked	

****

Turn Around Time: ☑RUSH–24HR ☐RUSH–48HR ☐RUSH–72HR ☐NORMAL

Short-Hold Notification: ☐ pH ☐Wet Chem ☐Metals (Filter/Pres) ☐Encore ☐ >1/2 HT expired… N/A

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____

_____

_____

********** LEAVE NO BLANK SPACES ; USE N/A **********

Headspace Anomaly ☐N/A _____

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # E4A190145

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1-95													
VOAH/ *														
40 CGT	1													

* VOA with headspace/bubbles

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☑ N/A _____

- **COOLERS**
  - _ Not Received (received COC only)
  - _ Leaking
  - _ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **CONTAINER(S)**
  - _ None
  - _ Not Intact
  - _ Other
- **TEMPERATURE (SPECS 4 ± 2°C)**
  - _ Cooler Temp(s)
  - _ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - _ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - _ Leaking
  - _ Broken
  - _ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - _ Samples received but NOT LISTED on COC
  - _ Logged based on Label Information
  - _ Logged based on info from other samples on COC
  - _ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis ☐ Other

Comments:

_ Corrective Action Implemented:

_ Client Informed: verbally on _____ By: _____ _ In writing on _____ By: _____

_ Sample(s) on hold until: _____ _ Sample(s) processed "as is."

Logged by/Date:	Log Review/Date:	PM Review/Date:
01/19/04	1/19/04	01.19.04

EXECUTIVE SUMMARY - Detection Highlights

E4A190145

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA014_SSF05_0001 01/19/04 09:45 001				
Arsenic	3.9	1.0	mg/kg	SW846 6010B
CSA015_SSWW02_0001 01/19/04 12:15 002				
Arsenic	15.4	1.0	mg/kg	SW846 6010B
CSA016_SSF05_0002 01/19/04 12:30 003				
Arsenic	4.5	1.0	mg/kg	SW846 6010B
CSA017_SSWW02_0002 01/19/04 12:45 004				
Arsenic	35.6	1.0	mg/kg	SW846 6010B
CSA018_SSEW02_0004 01/19/04 13:00 005				
Arsenic	11.3	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A190145

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A190145

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F771Q	001	CSA014_SSF05_0001	01/19/04	09:45
F771R	002	CSA015_SSWW02_0001	01/19/04	12:15
F771T	003	CSA016_SSF05_0002	01/19/04	12:30
F771V	004	CSA017_SSWW02_0002	01/19/04	12:45
F771W	005	CSA018_SSEW02_0004	01/19/04	13:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA014_SSF05_0001

TOTAL Metals

Lot-Sample #...: E4A190145-001 **Matrix.....:** SOLID
Date Sampled...: 01/19/04 09:45 **Date Received..:** 01/19/04 13:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4023494						
Arsenic	**3.9**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F771Q1CW**
		Dilution Factor: 1		Analysis Time..: 10:37	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4023235	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA015_SSWW02_0001

TOTAL Metals

Lot-Sample #...: E4A190145-002 **Matrix.....:** SOLID
Date Sampled...: 01/19/04 12:15 **Date Received..:** 01/19/04 13:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4023494						
Arsenic	**15.4**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F771R1AA**
		Dilution Factor: 1		Analysis Time..: 11:06	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4023235	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA016_SSF05_0002

TOTAL Metals

Lot-Sample #...: E4A190145-003 **Matrix.....:** SOLID
Date Sampled...: 01/19/04 12:30 **Date Received..:** 01/19/04 13:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4023494						
Arsenic	**4.5**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F771T1AA**
		Dilution Factor: 1		Analysis Time..: 11:27	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4023235	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA017_SSWW02_0002

TOTAL Metals

Lot-Sample #...: E4A190145-004 **Matrix.....:** SOLID
Date Sampled...: 01/19/04 12:45 **Date Received..:** 01/19/04 13:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4023494						
Arsenic	**35.6**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F771V1AA**
		Dilution Factor: 1		Analysis Time..: 11:35	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4023235	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA018_SSEW02_0004

TOTAL Metals

Lot-Sample #...: E4A190145-005 **Matrix.....:** SOLID
Date Sampled...: 01/19/04 13:00 **Date Received..:** 01/19/04 13:45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4023494						
Arsenic	**11.3**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F771W1AA**
		Dilution Factor: 1		Analysis Time..: 11:42	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4023235	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A190145

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6010B		4023494	4023235
002	SOLID	SW846 6010B		4023494	4023235
003	SOLID	SW846 6010B		4023494	4023235
004	SOLID	SW846 6010B		4023494	4023235
005	SOLID	SW846 6010B		4023494	4023235

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A190145 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A230000-494 **Prep Batch #...:** 4023494						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F8G9K1AA

Dilution Factor: 1

Analysis Time..: 10:24 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A190145 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A230000-494 **Prep Batch #...:** 4023494					
Arsenic	108	(75 - 115)	SW846 6010B	01/19-01/20/04	F8G9K1AC

Dilution Factor: 1 Analysis Time..: 10:29 Analyst ID.....: 021088
Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A190145 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A230000-494 **Prep Batch #...:** 4023494							
Arsenic	200	215	mg/kg	108	SW846 6010B	01/19-01/20/04	F8G9K1AC

Dilution Factor: 1 Analysis Time..: 10:29 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A190145 **Matrix.....:** SOLID
Date Sampled...: 01/19/04 09:45 **Date Received..:** 01/19/04 13:45

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A190145-001 **Prep Batch #...:** 4023494							
Arsenic	90	(75 - 115)			SW846 6010B	01/19-01/20/04	F771Q1CX
	95	(75 - 115)	5.4	(0-25)	SW846 6010B	01/19-01/20/04	F771Q1C0

Dilution Factor: 1
Analysis Time..: 10:52 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4023235

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A190145 **Matrix.....:** SOLID
Date Sampled...: 01/19/04 09:45 **Date Received..:** 01/19/04 13:45

MS Lot-Sample #: E4A190145-001 **Prep Batch #...:** 4023494

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic									
	3.9	200	183	mg/kg	90		SW846 6010B	01/19-01/20/04	F771Q1CX
	3.9	200	194	mg/kg	95	5.4	SW846 6010B	01/19-01/20/04	F771Q1C0

Dilution Factor: 1
Analysis Time..: 10:52 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4023235

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/20/04	Chain of Custody Number: 142200
Address: 9040 FRIARS ROAD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: ~~EGA~~ 200290	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): C6 PARCEL A EXCAVATION	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: ~~Unpres.~~ 4oz. JAR	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): ARSENIC	Special Instructions/ Conditions of Receipt
TB-HA012004-0001	1/20/04			X						3				HOLD
CSA030-SSEW02-0008	1/20/04	8:45				X	1						X	24 HR TAT
CSA031-SSF05-0007	1/20/04	9:00				X	1						X	24 HR TAT
CSA032-SSWW02-0007	1/20/04	9:15				X	1						X	24 HR TAT
CSA033-SSEW02-0009	1/20/04	9:30				X	1						X	24 HR TAT
CSA034-SSF05-0008	1/20/04	9:45				X	1						X	24 HR TAT
CSA035-SSWW02-0008	1/20/04	10:00				X	1						X	24 HR TAT
CSA036-SSEW02-0010	1/20/04	10:30				X	1						X	24 HR TAT
CSA037-SSF05-0009	1/20/04	10:35				X	1						X	24 HR TAT
CSA038-SSWW02-0009	1/20/04	10:40				X	1						X	24 HR TAT

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/20/04	12:00	1. Received By: Matt Crawford	1-20-04	12:40
2. Relinquished By: Matt Crawford	1-20-04	13:15	2. Received By: Jerry Swart	1-20-04	13:15
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009117

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 1-20-04

LIMS Lot #: ~~TA~~ A200290 Quote #: 42295

Client Name: Haley & Aldrich Project: Boeing C6

Received by: TS Date/Time Received: 01/20/04 @ 1315

Delivered by : ☐ Client ☑ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☐ Other _____

	Initial / Date
Custody Seal Status Cooler: ☐ Intact ☐ Broken ☑ None	AB 01/20/04
Custody Seal Status Samples: ☐ Intact ☐ Broken ☑ None	
Custody Seal #(s): _____ ☐ No Seal # ☑	
Sampler Signature on COC ☐ Yes ☐ No ☑ N/A	
IR Gun # A Correction Factor 0 °C IR passed daily verification ☑ Yes ☐ No	
Temperature - BLANK 6.0 °C +/- 0 CF = 6.0 °C	
Temperature – COOLER (___ °C ___ °C ___ °C ___ °C) = ___ avg °C +/- 0 CF = ___ °C	N/A
Samples outside temperature criteria but received within 6 hours of final sampling ☐ Yes ☑ N/A	
Sample Container(s): ☑ STL-LA ☐ Client	
One COC/Multiple coolers: ☐ Yes- # coolers ___ All within temp criteria ☐ Yes ☐ No ☑ N/A	
One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☑ N/A	
Samples: ☑ Intact ☐ Broken ☐ Other _____	
pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☑ N/A	
Anomalies: ☑ No ☐ Yes – complete CUR and Create NCM NCM # _____	
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☑ Yes ☐ N/A	
Labeled by: AB Labeling checked AB	
Turn Around Time: ☑ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☐ NORMAL	
Short-Hold Notification: ☐ pH ☐ Wet Chem ☐ Metals (Filter/Pres) ☐ Encore ☐ >1/2 HT expired	N/A

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____

_____

_____

********* LEAVE NO BLANK SPACES ; USE N/A *********

Headspace Anomaly ☑ N/A

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # E4A200290

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1	2-10												
VOAH/ *	3													—
4oz CGJ		1												—

* VOA with headspace/bubbles

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☐ N/A _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **CONTAINER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis ☐ Other

Comments:

_____

_____

_____

_____

_____

☐ Corrective Action Implemented:

☐ Client Informed: verbally on _____ By: _____ ☐ In writing on _____ By: _____

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date: 01/20/04	Log Review/Date:	PM Review/Date: 01/21/04

EXECUTIVE SUMMARY - Detection Highlights

E4A200290

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA030_SSEW02_0008 01/20/04 08:45 002				
Arsenic	8.9	1.0	mg/kg	SW846 6010B
CSA031_SSF05_0007 01/20/04 09:00 003				
Arsenic	3.6	1.0	mg/kg	SW846 6010B
CSA032_SSWW02_0007 01/20/04 09:15 004				
Arsenic	8.6	1.0	mg/kg	SW846 6010B
CSA033_SSEW02_0009 01/20/04 09:30 005				
Arsenic	15.8	1.0	mg/kg	SW846 6010B
CSA034_SSF05_0008 01/20/04 09:45 006				
Arsenic	5.4	1.0	mg/kg	SW846 6010B
CSA035_SSWW02_0008 01/20/04 10:00 007				
Arsenic	3.9	1.0	mg/kg	SW846 6010B
CSA036_SSEW02_0010 01/20/04 10:30 008				
Arsenic	28.0	1.0	mg/kg	SW846 6010B
CSA037_SSF05_0009 01/20/04 10:35 009				
Arsenic	3.5	1.0	mg/kg	SW846 6010B
CSA038_SSWW02_0009 01/20/04 10:40 010				
Arsenic	8.4	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A200290

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A200290

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F79LV	002	CSA030_SSEW02_0008	01/20/04	08:45
F79L2	003	CSA031_SSF05_0007	01/20/04	09:00
F79L5	004	CSA032_SSWW02_0007	01/20/04	09:15
F79L9	005	CSA033_SSEW02_0009	01/20/04	09:30
F79MD	006	CSA034_SSF05_0008	01/20/04	09:45
F79MG	007	CSA035_SSWW02_0008	01/20/04	10:00
F79MK	008	CSA036_SSEW02_0010	01/20/04	10:30
F79MQ	009	CSA037_SSF05_0009	01/20/04	10:35
F79NA	010	CSA038_SSWW02_0009	01/20/04	10:40

NOTE(S):

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- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA030_SSEW02_0008

TOTAL Metals

Lot-Sample #...: E4A200290-002 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 08:45 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**8.9**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79LV1AA**
		Dilution Factor: 1		Analysis Time..: 19:05	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA031_SSF05_0007

TOTAL Metals

Lot-Sample #...: E4A200290-003 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 09:00 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**3.6**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79L21AA**
		Dilution Factor: 1		Analysis Time..: 19:35	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA032_SSWW02_0007

TOTAL Metals

Lot-Sample #...: E4A200290-004 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 09:15 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**8.6**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79L51AA**
		Dilution Factor: 1		Analysis Time..: 19:43	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA033_SSEW02_0009

TOTAL Metals

Lot-Sample #...: E4A200290-005 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 09:30 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**15.8**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79L91AA**
		Dilution Factor: 1		Analysis Time..: 19:50	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA034_SSF05_0008

TOTAL Metals

Lot-Sample #...: E4A200290-006 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 09:45 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**5.4**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79MD1AA**
		Dilution Factor: 1		Analysis Time..: 19:58	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA035_SSWW02_0008

TOTAL Metals

Lot-Sample #...: E4A200290-007 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 10:00 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**3.9**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79MG1AA**
		Dilution Factor: 1		Analysis Time..: 20:18	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA036_SSEW02_0010

TOTAL Metals

Lot-Sample #...: E4A200290-008 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 10:30 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**28.0**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79MK1AA**
		Dilution Factor: 1		Analysis Time..: 20:26	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA037_SSF05_0009

TOTAL Metals

Lot-Sample #...: E4A200290-009 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 10:35 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**3.5**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79MQ1AA**
		Dilution Factor: 1		Analysis Time..: 20:33	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA038_SSWW02_0009

TOTAL Metals

Lot-Sample #...: E4A200290-010 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 10:40 **Date Received..:** 01/20/04 13:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020611						
Arsenic	**8.4**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20/04**	**F79NA1AA**
		Dilution Factor: 1		Analysis Time..: 20:41	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020309	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A200290

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
002	SOLID	SW846 6010B		4020611	4020309
003	SOLID	SW846 6010B		4020611	4020309
004	SOLID	SW846 6010B		4020611	4020309
005	SOLID	SW846 6010B		4020611	4020309
006	SOLID	SW846 6010B		4020611	4020309
007	SOLID	SW846 6010B		4020611	4020309
008	SOLID	SW846 6010B		4020611	4020309
009	SOLID	SW846 6010B		4020611	4020309
010	SOLID	SW846 6010B		4020611	4020309

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A200290 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A200000-611 **Prep Batch #...:** 4020611						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/20/04	F79TQ1AA

Dilution Factor: 1

Analysis Time..: 18:52 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A200290 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A200000-611 **Prep Batch #...:** 4020611					
Arsenic	98	(75 - 115)	SW846 6010B	01/20/04	F79TQ1AC
		Dilution Factor: 1	Analysis Time..: 18:58	Analyst ID.....: 021088	
		Instrument ID..: M01			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A200290 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A200000-611 **Prep Batch #...:** 4020611							
Arsenic	200	195	mg/kg	98	SW846 6010B	01/20/04	F79TQ1AC

Dilution Factor: 1 Analysis Time..: 18:58 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A200290 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 08:45 **Date Received..:** 01/20/04 13:15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A200290-002 **Prep Batch #...:** 4020611							
Arsenic	89	(75 - 115)			SW846 6010B	01/20/04	F79LV1AC
	92	(75 - 115)	3.3	(0-25)	SW846 6010B	01/20/04	F79LV1AD

Dilution Factor: 1
Analysis Time..: 19:20 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4020309

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A200290 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 08:45 **Date Received..:** 01/20/04 13:15

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A200290-002 **Prep Batch #...:** 4020611									
Arsenic									
	8.9	200	187	mg/kg	89		SW846 6010B	01/20/04	F79LV1AC
	8.9	200	194	mg/kg	92	3.3	SW846 6010B	01/20/04	F79LV1AD

Dilution Factor: 1
Analysis Time..: 19:20 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4020309

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/19/2004	Chain of Custody Number: 142199
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: E4A190151	Page 1 of
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): C6 PARCEL A	Carrier/Waybill Number: JAR		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: ~~Unpres~~ 2oz	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): ARSENIC	Special Instructions/ Conditions of Receipt
TB_HA01190 4_0002	1/19/04	—		X						3				HOLD
CSA019_SSF05_0003	1/19/04	13:45				X	1						X	24 HR TAT
CSA020_SSWW02_0003	1/19/04	14:00				X	1			3			X	24 HR TAT
CSA021_SSWW02_0004	1/19/04	14:15				X	1			3			X	24 HR TAT
CSA022_SSF05_0004	1/19/04	14:30				X	1			3			X	24 HR TAT
CSA023_SSEW02_0005	1/19/04	15:30				X	1			3			X	
CSA024_SSEW02_0006	1/19/04	15:55				X	1			3			X	
CSA025_SSF05_0005	1/19/04	16:00				X	1			3			X	
CSA026_SSWW02_0005	1/19/04	16:05				X	1			3			X	
CSA027_SSEW02_0007	1/19/04	16:05				X	1			3			X	
CSA028_SSF05_0006	1/19/04	16:10				X	1			3			X	
CSA029_SSWW02_0006	1/19/04	16:15				X	1			3			X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	1/19/04	16:15	1. Received By	1-19-04	16:15
2. Relinquished By	1-19-04	17:20	2. Received By	1-19-04	1720
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009138

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 1-19-04

LIMS Lot #: E4A190151 Quote #: #2295

Client Name: Haley Aldrich Project: C6 Parcel A

Received by: TRS Date/Time Received: 1-19-04 1720

Delivered by : ☐ Client ☐ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☒ Other MC

Initial / Date

Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None ..... TRS 1-19-04

Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None ..... ✓

Custody Seal #(s): _____ ☒ No Seal # ..... ✓

Sampler Signature on COC ☐ Yes ☒ No ☐ N/A... ✓

IR Gun # A Correction Factor 0 °C IR passed daily verification ☒ Yes ☐ No ..... ✓

Temperature - BLANK 2.6 °C +/- 0 CF = 2.6 °C ..... TRS

Temperature – COOLER (____ °C ____ °C ____ °C ____ °C) = ____ avg °C +/- 0 CF = ____ °C..... N/A

Samples outside temperature criteria but received within 6 hours of final sampling ☐ Yes ☒ N/A... ✓

Sample Container(s): ☒ STL-LA ☐ Client ..... ✓

One COC/Multiple coolers: ☐ Yes- # coolers ____ All within temp criteria ☐ Yes ☐ No ☒ N/A.... ✓

One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☒ N/A ... ✓

Samples: ☒ Intact ☐ Broken ☐ Other _____ ..... ✓

pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☒ N/A.. ✓

Anomalies: ☐ No ☐ Yes – complete CUR and Create NCM NCM # _____ ..... ✓

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☐ Yes ☐ N/A.... ✓

Labeled by: _____ Labeling checked ..... ✓

Turn Around Time: ☐ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☐ NORMAL ..... ✓

Short-Hold Notification: ☐ pH ☐ Wet Chem ☐ Metals (Filter/Pres) ☐ Encore ☐ >1/2 HT expired... ✓

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____ ..... ✓

_____ ..... ✓

_____ ..... ✓

********** LEAVE NO BLANK SPACES ; USE N/A **********

Headspace Anomaly ☒ N/A ✓

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # E4A190151

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1-11	12												
VOAH/ *		3												
4oz(G)	1	(hold)												

* VOA with headspace/bubbles

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☐ N/A _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other

CONTAINER(S)
- ☐ None
- ☐ Not Intact
- ☐ Other

- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis ☐ Other

Comments:

_____

_____

_____

_____

_____

☐ Corrective Action Implemented:

☐ Client Informed: verbally on _____ By: _____ ☐ In writing on _____ By: _____

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date:	Log Review/Date:	PM Review/Date:
1-19-04	1/20/04	01.20.04

EXECUTIVE SUMMARY - Detection Highlights

E4A190151

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA019_SSF05_0003 01/19/04 13:45 001				
Arsenic	44.5	1.0	mg/kg	SW846 6010B
CSA020_SSWW02_0003 01/19/04 14:00 002				
Arsenic	4.2	1.0	mg/kg	SW846 6010B
CSA021_SSWW02_0004 01/19/04 14:15 003				
Arsenic	9.0	1.0	mg/kg	SW846 6010B
CSA022_SSF05_0004 01/19/04 14:30 004				
Arsenic	5.6	1.0	mg/kg	SW846 6010B
CSA023_SSEW02_0005 01/19/04 15:30 005				
Arsenic	2.9	1.0	mg/kg	SW846 6010B
CSA024_SSEW02_0006 01/19/04 15:55 006				
Arsenic	3.0	1.0	mg/kg	SW846 6010B
CSA025_SSF05_0005 01/19/04 16:00 007				
Arsenic	4.5	1.0	mg/kg	SW846 6010B
CSA026_SSWW02_0005 01/19/04 16:05 008				
Arsenic	19.0	1.0	mg/kg	SW846 6010B
CSA027_SSEW02_0007 01/19/04 16:05 009				
Arsenic	3.7	1.0	mg/kg	SW846 6010B
CSA028_SSF05_0006 01/19/04 16:10 010				
Arsenic	3.0	1.0	mg/kg	SW846 6010B
CSA029_SSWW02_0006 01/19/04 16:15 011				
Arsenic	8.7	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A190151

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A190151

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F772N	001	CSA019_SSF05_0003	01/19/04	13:45
F772P	002	CSA020_SSWW02_0003	01/19/04	14:00
F772Q	003	CSA021_SSWW02_0004	01/19/04	14:15
F772R	004	CSA022_SSF05_0004	01/19/04	14:30
F772T	005	CSA023_SSEW02_0005	01/19/04	15:30
F772V	006	CSA024_SSEW02_0006	01/19/04	15:55
F772W	007	CSA025_SSF05_0005	01/19/04	16:00
F772X	008	CSA026_SSWW02_0005	01/19/04	16:05
F7720	009	CSA027_SSEW02_0007	01/19/04	16:05
F7721	010	CSA028_SSF05_0006	01/19/04	16:10
F7722	011	CSA029_SSWW02_0006	01/19/04	16:15

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA019_SSF05_0003

TOTAL Metals

Lot-Sample #...: E4A190151-001 **Matrix.....:** SO
Date Sampled...: 01/19/04 13:45 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**44.5**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F772N1AA**
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA020_SSWW02_0003

TOTAL Metals

Lot-Sample #...: E4A190151-002 **Matrix.....:** SO
Date Sampled...: 01/19/04 14:00 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**4.2**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F772P1AA**
		Dilution Factor: 1		Analysis Time..: 13:05	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA021_SSWW02_0004

TOTAL Metals

Lot-Sample #...: E4A190151-003 **Matrix.....:** SO
Date Sampled...: 01/19/04 14:15 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**9.0**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F772Q1AA**
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA022_SSF05_0004

TOTAL Metals

Lot-Sample #...: E4A190151-004 **Matrix.....:** SO
Date Sampled...: 01/19/04 14:30 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**5.6**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F772R1AA**
		Dilution Factor: 1		Analysis Time..: 13:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA023_SSEW02_0005

TOTAL Metals

Lot-Sample #...: E4A190151-005 **Matrix.....:** SO
Date Sampled...: 01/19/04 15:30 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**2.9**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F772T1AA**
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA024_SSEW02_0006

TOTAL Metals

Lot-Sample #...: E4A190151-006 **Matrix.....:** SO
Date Sampled...: 01/19/04 15:55 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**3.0**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F772V1AA**
		Dilution Factor: 1		Analysis Time..: 13:48	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA025_SSF05_0005

TOTAL Metals

Lot-Sample #...: E4A190151-007 **Matrix.....:** SO
Date Sampled...: 01/19/04 16:00 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**4.5**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F772W1AA**
		Dilution Factor: 1		Analysis Time..: 13:56	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA026_SSWW02_0005

TOTAL Metals

Lot-Sample #...: E4A190151-008 **Matrix.....:** SO
Date Sampled...: 01/19/04 16:05 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**19.0**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F772X1AA**
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA027_SSEW02_0007

TOTAL Metals

Lot-Sample #...: E4A190151-009 **Matrix.....:** SO
Date Sampled...: 01/19/04 16:05 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**3.7**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F77201AA**
		Dilution Factor: 1		Analysis Time..: 14:11	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA028_SSF05_0006

TOTAL Metals

Lot-Sample #...: E4A190151-010 **Matrix.....:** SO
Date Sampled...: 01/19/04 16:10 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**3.0**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F77211AA**
		Dilution Factor: 1		Analysis Time..: 14:18	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA029_SSWW02_0006

TOTAL Metals

Lot-Sample #...: E4A190151-011 **Matrix.....:** SO
Date Sampled...: 01/19/04 16:15 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	**8.7**	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F77221AA**
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A190151

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SO	SW846 6010B		4020582	4020282
002	SO	SW846 6010B		4020582	4020282
003	SO	SW846 6010B		4020582	4020282
004	SO	SW846 6010B		4020582	4020282
005	SO	SW846 6010B		4020582	4020282
006	SO	SW846 6010B		4020582	4020282
007	SO	SW846 6010B		4020582	4020282
008	SO	SW846 6010B		4020582	4020282
009	SO	SW846 6010B		4020582	4020282
010	SO	SW846 6010B		4020582	4020282
011	SO	SW846 6010B		4020582	4020282

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A190151 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A200000-582 **Prep Batch #...:** 4020582						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F79PL1AA

Dilution Factor: 1

Analysis Time..: 12:23 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A190151 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A200000-582 **Prep Batch #...:** 4020582					
Arsenic	109	(75 - 115)	SW846 6010B	01/19-01/20/04	F79PL1AC

Dilution Factor: 1 Analysis Time..: 12:28 Analyst ID.....: 021088
Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A190151 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A200000-582 **Prep Batch #...:** 4020582							
Arsenic	200	217	mg/kg	109	SW846 6010B	01/19-01/20/04	F79PL1AC

Dilution Factor: 1 Analysis Time..: 12:28 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A190151 **Matrix.....:** SO
Date Sampled...: 01/19/04 13:45 **Date Received..:** 01/19/04 17:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A190151-001 **Prep Batch #...:** 4020582							
Arsenic	96	(75 - 115)			SW846 6010B	01/19-01/20/04	F772N1AC
	93	(75 - 115)	3.1	(0-25)	SW846 6010B	01/19-01/20/04	F772N1AD

Dilution Factor: 1
Analysis Time..: 12:51 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4020282

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A190151 **Matrix.....:** SO
Date Sampled...: 01/19/04 13:45 **Date Received..:** 01/19/04 17:20

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A190151-001 **Prep Batch #...:** 4020582									
Arsenic									
	44.5	200	237	mg/kg	96		SW846 6010B	01/19-01/20/04	F772N1AC
	44.5	200	230	mg/kg	93	3.1	SW846 6010B	01/19-01/20/04	F772N1AD

Dilution Factor: 1
Analysis Time..: 12:51 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4020282

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

SEVERN TRENT SERVICES **Severn Trent Laboratories, Inc.**

STL-4124 (0901)

Client: HALEY & ALDRICH INC	Project Manager: SCOTT ZACHARY	Date: 1/20/04	Chain of Custody Number: 141801
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: E4A200330	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): C6 PARCEL A EXC	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): Arsenic	Special Instructions/ Conditions of Receipt
CSAØ46_SSWWØ2_ØØ13	1/20/04	15:30				X	1						X	24 HR TAT
CSAØ47_SSWWØ2_ØØ14	1/20/04	15:35				↓	↓						↓	↓
CSAØ48_SSWWØ2_ØØ15	1/20/04	15:40				↓	↓						↓	↓
CSAØ39_SSFØ5_ØØ1Ø	1/20/04	16:00				↓	↓						↓	↓
CSAØ40_SSWWØ2_ØØ1Ø	1/20/04	16:05				↓	↓						↓	↓
CSAØ41_SSEWØ2_ØØ11	1/20/04	16:10				↓	↓						↓	↓
CSAØ42_SS(BH)F05_ØØ11	1/20/04	16:15				↓	↓						↓	↓
CSAØ43_SSWWØ2_(BH)ØØ11	1/20/04	16:20				↓	↓						↓	↓

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	1/20/04	16:30	1. Received By	1-20-04	16:30
2. Relinquished By	1-20-04	18:15	2. Received By	01.20.04	1815
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009161

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 1-20-04

LIMS Lot #: E4A200 330 Quote #: 42295

Client Name: Haley and Aldrich Project: Boeing C6

Received by: DS Date/Time Received: 1-20-04 / 18:15

Delivered by : ☐ Client ☒ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☐ Other

	Initial / Date
Custody Seal Status Cooler: ☐ Intact ☐ Broken ☒ None	AG / 1-20-04
Custody Seal Status Samples: ☐ Intact ☐ Broken ☒ None	
Custody Seal #(s): ☒ No Seal #	
Sampler Signature on COC ☐ Yes ☐ No ☒ N/A	
IR Gun # A Correction Factor 0 °C IR passed daily verification ☒ Yes ☐ No	
Temperature - BLANK ____ °C +/- 0 CF = ____ °C	
Temperature – COOLER (7.8 °C 5.8 °C 6.4 °C 5.7 °C) = 6.4 avg °C +/- 0 CF = 6.4 °C	
Samples outside temperature criteria but received within 6 hours of final sampling ☒ Yes ☐ N/A	
Sample Container(s): ☒ STL-LA ☐ Client	
One COC/Multiple coolers: ☐ Yes- # coolers ____ All within temp criteria ☐ Yes ☐ No ☒ N/A	
One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☒ N/A	
Samples: ☒ Intact ☐ Broken ☐ Other	
pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☒ N/A	
Anomalies: ☒ No ☐ Yes – complete CUR and Create NCM NCM #	
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☒ Yes ☐ N/A	
Labeled by: ~~DS~~ di AB Labeling checked ~~DS~~ di AB	01/21/04
Turn Around Time: ☒ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☐ NORMAL	
Short-Hold Notification: ☐ pH ☐ Wet Chem ☐ Metals (Filter/Pres) ☐ Encore ☐ >1/2 HT expired	N/A

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____

_____

_____

********* LEAVE NO BLANK SPACES ; USE N/A *********

Headspace Anomaly ☒ N/A AB 01/21/04

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # EUA200330

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1-58													
VOAH/ *														
1gCGJ	1													

* VOA with headspace/bubbles

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore
AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☒ N/A 01/21/04

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other

CONTAINER(S)
- ☐ None
- ☐ Not Intact
- ☐ Other

- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis ☐ Other

Comments:

01/21/04 CANCEL CSA 04S-SSWW02-0014

☐ Corrective Action Implemented:

☐ Client Informed: verbally on _____ By: _____ ☐ In writing on _____ By: _____

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date:	Log Review/Date:	PM Review/Date:
01.20.04	1-21-04	01.20.04

EXECUTIVE SUMMARY - Detection Highlights

E4A200330

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CSA046_SSWW02_0013 01/20/04 15:30 001				
Arsenic	16.4	1.0	mg/kg	SW846 6010B
CSA047_SSWW02_0014 01/20/04 15:35 002				
Arsenic	14.9	1.0	mg/kg	SW846 6010B
CSA039_SSF05_0010 01/20/04 16:00 004				
Arsenic	3.6	1.0	mg/kg	SW846 6010B
CSA040_SSWW02_0010 01/20/04 16:05 005				
Arsenic	6.8	1.0	mg/kg	SW846 6010B
CSA041_SSEW02_0011 01/20/04 16:10 006				
Arsenic	7.8	1.0	mg/kg	SW846 6010B
CSA042_SSF05_0011 01/20/04 16:15 007				
Arsenic	4.5	1.0	mg/kg	SW846 6010B
CSA043_SSWW02_0011 01/20/04 16:20 008				
Arsenic	2.8	1.0	mg/kg	SW846 6010B

METHODS SUMMARY

E4A200330

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A200330

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F795C	001	CSA046_SSWW02_0013	01/20/04	15:30
F795D	002	CSA047_SSWW02_0014	01/20/04	15:35
F795F	004	CSA039_SSF05_0010	01/20/04	16:00
F795G	005	CSA040_SSWW02_0010	01/20/04	16:05
F795H	006	CSA041_SSEW02_0011	01/20/04	16:10
F795L	007	CSA042_SSF05_0011	01/20/04	16:15
F795M	008	CSA043_SSWW02_0011	01/20/04	16:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: CSA046_SSWW02_0013

TOTAL Metals

Lot-Sample #...: E4A200330-001 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 15:30 **Date Received..:** 01/20/04 18:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020739						
Arsenic	**16.4**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20-01/21/04**	**F795C1AA**
		Dilution Factor: 1		Analysis Time..: 11:13	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020367	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA047_SSWW02_0014

TOTAL Metals

Lot-Sample #...: E4A200330-002 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 15:35 **Date Received..:** 01/20/04 18:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020739						
Arsenic	**14.9**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20-01/21/04**	**F795D1AA**
		Dilution Factor: 1		Analysis Time..: 11:43	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020367	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA039_SSF05_0010

TOTAL Metals

Lot-Sample #...: E4A200330-004 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 16:00 **Date Received..:** 01/20/04 18:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020739						
Arsenic	**3.6**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20-01/21/04**	**F795F1AA**
		Dilution Factor: 1		Analysis Time..: 12:11	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020367	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA040_SSWW02_0010

TOTAL Metals

Lot-Sample #...: E4A200330-005 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 16:05 **Date Received..:** 01/20/04 18:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020739						
Arsenic	**6.8**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20-01/21/04**	**F795G1AA**
		Dilution Factor: 1		Analysis Time..: 12:19	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020367	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA041_SSEW02_0011

TOTAL Metals

Lot-Sample #...: E4A200330-006 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 16:10 **Date Received..:** 01/20/04 18:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020739						
Arsenic	**7.8**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20-01/21/04**	**F795H1AA**
		Dilution Factor: 1		Analysis Time..: 12:26	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020367	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA042_SSF05_0011

TOTAL Metals

Lot-Sample #...: E4A200330-007 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 16:15 **Date Received..:** 01/20/04 18:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020739						
Arsenic	**4.5**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20-01/21/04**	**F795L1AA**
		Dilution Factor: 1		Analysis Time..: 12:34	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020367	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA043_SSWW02_0011

TOTAL Metals

Lot-Sample #...: E4A200330-008 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 16:20 **Date Received..:** 01/20/04 18:15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020739						
Arsenic	**2.8**	**1.0**	**mg/kg**	**SW846 6010B**	**01/20-01/21/04**	**F795M1AA**
		Dilution Factor: 1		Analysis Time..: 12:41	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020367	MDL.....: 0.40	

QC DATA ASSOCIATION SUMMARY

E4A200330

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 6010B		4020739	4020367
002	SOLID	SW846 6010B		4020739	4020367
004	SOLID	SW846 6010B		4020739	4020367
005	SOLID	SW846 6010B		4020739	4020367
006	SOLID	SW846 6010B		4020739	4020367
007	SOLID	SW846 6010B		4020739	4020367
008	SOLID	SW846 6010B		4020739	4020367

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A200330 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A200000-739 **Prep Batch #...:** 4020739						
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/20-01/21/04	F796A1AA

Dilution Factor: 1

Analysis Time..: 11:00 Analyst ID.....: 021088 Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A200330 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A200000-739 **Prep Batch #...:** 4020739					
Arsenic	98	(75 - 115)	SW846 6010B	01/20-01/21/04	F796A1AC

Dilution Factor: 1 Analysis Time..: 11:06 Analyst ID.....: 021088
Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A200330 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E4A200000-739 **Prep Batch #...:** 4020739							
Arsenic	200	197	mg/kg	98	SW846 6010B	01/20-01/21/04	F796A1AC

Dilution Factor: 1 Analysis Time..: 11:06 Analyst ID.....: 021088

Instrument ID..: M01

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A200330 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 15:30 **Date Received..:** 01/20/04 18:15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A200330-001 **Prep Batch #...:** 4020739							
Arsenic	92	(75 - 115)			SW846 6010B	01/20-01/21/04	F795C1AC
	93	(75 - 115)	0.99	(0-25)	SW846 6010B	01/20-01/21/04	F795C1AD

Dilution Factor: 1
Analysis Time..: 11:28 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4020367

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A200330 **Matrix.....:** SOLID
Date Sampled...: 01/20/04 15:30 **Date Received..:** 01/20/04 18:15

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A200330-001 **Prep Batch #...:** 4020739									
Arsenic									
	16.4	200	200	mg/kg	92		SW846 6010B	01/20-01/21/04	F795C1AC
	16.4	200	202	mg/kg	93	0.99	SW846 6010B	01/20-01/21/04	F795C1AD

Dilution Factor: 1
Analysis Time..: 11:28 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4020367

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

APPENDIX C

Soil Confirmation Samples – Data Validation Report

LABORATORY DATA CONSULTANTS, INC.
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Haley & Aldrich, Inc.
9040 Friars Road, Suite 220
San Diego, CA 92108
ATTN: Ms. Beth Breitenbach

February 18, 2004
Revised

SUBJECT: Boeing C-6 Facility, Data Validation

Dear Ms. Breitenbach,

Enclosed is the final validation report for the fraction listed below. This SDG was received on February 4, 2004. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 11521:

SDG #	Fraction
E4A190151	Arsenic

The data validation was performed under Tier 1, Tier 2 and Tier 3 guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, February 1994
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996

Please feel free to contact us if you have any questions.

Sincerely,

Steven A. Ziliak
Senior Chemist

11521COV.wpd

Attachment 1

LDC #11521 (Haley & Aldrich, Inc.-San Diego / Boeing C-6 Facility)

LDC	SDG#	DATE REC'D	DATE DUE	As (6010B)																															
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	E4A190151	2-4-04	2-26-04	0	4	Tier 2																													
A	E4A190151	2-4-04	2-26-04	0	1	Tier 3																													
A	E4A190151	2-4-04	2-26-04	0	6	Tier 1																													
Total	TH			4	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Shaded cells indicate Tier III validation (all other cells are Tier II validation). Sample counts do not include MS, MSD, or DUP's.

11521ST.wpd

Boeing C-6 Facility
Data Validation Reports
LDC# 11521

Arsenic

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Boeing Building C-6

Collection Date: January 19, 2004

LDC Report Date: February 18, 2004

Matrix: Soil

Parameters: Arsenic

Validation Level: Tier 1, Tier 2, & Tier 3

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): E4A190151

Sample Identification

CSA019_SSF05_0003*
CSA020_SSWW02_0003*
CSA021_SSWW02_0004*
CSA022_SSSF05_0004**
CSA023_SSEW02_0005*
CSA024_SSEW02_0006*
CSA025_SSF05_0005*
CSA026_SSWW02_0005
CSA027_SSEW02_0007
CSA028_SSF05_0006
CSA029_SSWW02_0006
CSA019_SSF05_0003MS
CSA019_SSF05_0003MSD

*Indicates sample underwent a Tier 1 review
**Indicates sample underwent a Tier 3 review
All others samples underwent a Tier 2 review

Introduction

This data review covers 13 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Arsenic.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a Tier 3 review. A Tier 2 review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Tier 2 or Tier 1 criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

BOE-C6-0009185

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Internal Standards

ICP-MS was not utilized in this SDG.

IX. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

X. ICP Serial Dilution

ICP serial dilution was not required by the method.

XI. Sample Result Verification

The system performance was within validation criteria for samples on which a Tier 3 review was performed. Raw data were not evaluated for the samples reviewed by Tier 2 or Tier 1 criteria.

Sample results were reported on a wet weight basis.

XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

XIII. Field Duplicates

No field duplicates were identified in this SDG.

XIV. Field Blanks

No field blanks were identified in this SDG.

BOE-C6-0009187

Boeing Building C-6
Arsenic - Data Qualification Summary - SDG E4A190151

No Sample Data Qualified in this SDG

Boeing Building C-6
Arsenic - Laboratory Blank Data Qualification Summary - SDG E4A190151

No Sample Data Qualified in this SDG

HALEY & ALDRICH INC

Client Sample ID: CSA019_SSF05_0003

TOTAL Metals

Lot-Sample #...: E4A190151-001 Matrix.....: SO
Date Sampled...: 01/19/04 13:45 Date Received..: 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	44.5	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F772N1AA
		Dilution Factor: 1		Analysis Time..: 12:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA020_SSWW02_0003

TOTAL Metals

Lot-Sample #...: E4A190151-002 **Matrix.....:** SO
Date Sampled...: 01/19/04 14:00 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	4.2	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F772P1AA
		Dilution Factor: 1		Analysis Time..: 13:05	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

1/21/04

HALEY & ALDRICH INC

Client Sample ID: CSA021_SSWW02_0004

TOTAL Metals

Lot-Sample #...: E4A190151-003 Matrix.....: SO
Date Sampled...: 01/19/04 14:15 Date Received..: 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	9.0	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F772Q1AA
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

1/21/04

HALEY & ALDRICH INC

Client Sample ID: CSA022_SSF05_0004

TOTAL Metals

Lot-Sample #...: E4A190151-004 **Matrix.....:** SO
Date Sampled...: 01/19/04 14:30 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	5.6	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F772R1AA
		Dilution Factor: 1		Analysis Time..: 13:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

1/21/04

HALEY & ALDRICH INC

Client Sample ID: CSA023_SSEW02_0005

TOTAL Metals

Lot-Sample #...: E4A190151-005 **Matrix.....:** SO
Date Sampled...: 01/19/04 15:30 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	2.9	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F772T1AA
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

1 21704

HALEY & ALDRICH INC

Client Sample ID: CSA024_SSEW02_0006

TOTAL Metals

Lot-Sample #...: E4A190151-006 Matrix.....: SO
Date Sampled...: 01/19/04 15:55 Date Received..: 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	3.0	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F772V1AA
		Dilution Factor: 1		Analysis Time..: 13:48	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

1/21/04

HALEY & ALDRICH INC

Client Sample ID: CSA025_SSF05_0005

TOTAL Metals

Lot-Sample #...: E4A190151-007 **Matrix.....:** SO
Date Sampled...: 01/19/04 16:00 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	4.5	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F772W1AA
		Dilution Factor: 1		Analysis Time..: 13:56	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

1 21704

HALEY & ALDRICH INC

Client Sample ID: CSA026_SSWW02_0005

TOTAL Metals

Lot-Sample #...: E4A190151-008 Matrix.....: SO
Date Sampled...: 01/19/04 16:05 Date Received..: 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	19.0	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F772X1AA
		Dilution Factor: 1		Analysis Time..: 14:03	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

121704

HALEY & ALDRICH INC

Client Sample ID: CSA027_SSEW02_0007

TOTAL Metals

Lot-Sample #...: E4A190151-009 Matrix.....: SO
Date Sampled...: 01/19/04 16:05 Date Received..: 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	3.7	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F77201AA
		Dilution Factor: 1		Analysis Time..: 14:11	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

HALEY & ALDRICH INC

Client Sample ID: CSA028_SSF05_0006

TOTAL Metals

Lot-Sample #...: E4A190151-010 **Matrix.....:** SO
Date Sampled...: 01/19/04 16:10 **Date Received..:** 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	3.0	**1.0**	**mg/kg**	**SW846 6010B**	**01/19-01/20/04**	**F77211AA**
		Dilution Factor: 1		Analysis Time..: 14:18	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

1/21/04

HALEY & ALDRICH INC

Client Sample ID: CSA029_SSWW02_0006

TOTAL Metals

Lot-Sample #...: E4A190151-011 Matrix.....: SO
Date Sampled...: 01/19/04 16:15 Date Received..: 01/19/04 17:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4020582						
Arsenic	8.7	1.0	mg/kg	SW846 6010B	01/19-01/20/04	F77221AA
		Dilution Factor: 1		Analysis Time..: 14:26	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4020282	MDL.....: 0.40	

1 21709

LDC #: 11521A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 2-17-04

SDG #: ~~EA4190151~~ E4A190151 EPA Region 1 - Tier I/II/III Page: 1 of 1

Laboratory: Severn Trent Laboratories, Inc. Reviewer: MG

2nd Reviewer: [illegible]

METHOD: Arsenic (EPA SW 846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 1-19-04
II.	Calibration	A	
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Matrix Spike Analysis	A	MS/MSD
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS
VIII.	Internal Standard (ICP-MS)	N	Not utilized
IX.	Furnace Atomic Absorption QC	N	" "
X.	ICP Serial Dilution	N	Not required
XI.	Sample Result Verification	SW	Not reviewed for Tier II validation.
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: ** Indicates sample underwent Tier III validation.
all Soil * Indicates sample underwent Tier I validation.

1	CSA019_SSF05_0003*	11	CSA029_SSWW02_0006	21		31	
2	CSA020_SSWW02_0003*	12	CSA019_SSF05_0003MS	22		32	
3	CSA021_SSWW02_0004*	13	CSA019_SSF05_0003MSD	23		33	
4	CSA022_SSSF05_0004**	14	PBS	24		34	
5	CSA023_SSEW02_0005*	15		25		35	
6	CSA024_SSEW02_0006*	16		26		36	
7	CSA025_SSF05_0005*	17		27		37	
8	CSA026_SSWW02_0005	18		28		38	
9	CSA027_SSEW02_0007	19		29		39	
10	CSA028_SSF05_0006	20		30		40	

Notes: Samples with no asterisk are Tier II.

11521A4W.wpd

LDC #: 11521A4
SDG #: ~~EA4190151~~
E4A190151

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: MG
2nd Reviewer: lm

Method: Metals (EPA SW 826 Method 6010/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury and 85-115% for cyanide) QC limits?	✓			
Were all initial calibration correlation coefficients ≥ 0.995?	✓			
Was a midrange cyanide standard distilled?			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
IV. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	✓			
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and < 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			
VI. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients ≥ 0.995?			✓	
Do all applicable analysies have duplicate injections?			✓	

MET-SW.IV version 1.0

LDC #: 11521A46
SDG #: ~~EA4190151~~
E4A190151

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%?			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
VII. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the IDL?		✓		
Were all percent differences (%Ds) ≤ 10%?			✓	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			✓	
VIII. Internal Standards (EPA SW 846 Method 6020)				
Were all the percent recoveries (%R) within the 30-120% of the intensity of the internal standard in the associated initial calibration?			✓	
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XI. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XII. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XIII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 11521A4
SDG #: E4A190151

VALIDATION FINDINGS WORKSHEET
Sample Result Verification

Page: 1 of 1
Reviewer: MG
2nd Reviewer: MY

METHOD: Trace metals (EPA SW-846 6010/7000)

#	Sample ID	Analyte	Result (units)	RL (units)	Finding	Qualifications
1	all	As			(Results are reported on a wet weight basis)	text

Comments:

A6VRD.4C5

BOE-C6-0009203

LDC #: 11521A4
SDG #: E4A190151

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: MG
2nd Reviewer: MY

METHOD: Trace Metals (EPA SW 846 Method 6010/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
0948 ICV	ICP (Initial calibration)	As	1017.2	1000	102	not reported	Y
	GFAA (Initial calibration)						
	CVAA (Initial calibration)						
1209 CCV	ICP (Continuing calibration)	As	509.51	500	102		
	GFAA (Continuing calibration)						
	CVAA (Continuing calibration)						
	Cyanide (Initial calibration)						
	Cyanide (Continuing calibration)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CALCLC.4SW

BOE-C6-0009204

LDC #: 11521A4
SDG #: ~~EA4190151~~
E4A190151

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recaluculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
1009 ICSAB	ICP interference check	As	1068.9 (µg/L)	1000 (µg/L)	107	not reported	Y
LCS	Laboratory control sample	As	217 (mg/kg)	200 (mg/kg)	108	109	↓
12	Matrix spike	As	(SSR-SR) 192.6 (mg/kg)	200 (mg/kg)	96	96	↓
12/13	Duplicate	As	237 (mg/kg)	230 (mg/kg)	3.0	3.1	↓
—	ICP serial dilution	—	—	—	—	—	—

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

T0TCLC.4SW

BOE-C6-0009205

LDC #: 11521A4
SDG #: ~~E4A190151~~ E4A190151

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: MG
2nd reviewer: ~~MH~~

METHOD: Trace Metals (EPA SW 846 Method 6010/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for #4 As were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)(%S)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor
%S = Decimal percent solids

Recalculation:

$$\frac{(0.05565\ mg/L)(0.100\ L)}{(0.00100\ kg)} = 5.565\ mg/kg$$

(wet weight)

Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
4	As	5.6	5.6	Y

RECALC.4S2

APPENDIX D

Import Soil Technical Memorandum

HALEY & ALDRICH

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

TECHNICAL MEMORANDUM

IMPORT SOIL EVALUATION
USE OF SOIL SOURCE AT CLIFTON AND CRESCENT
AS IMPORT TO PARCEL A

To: **Mr. Brian Mossman**
Boeing Realty Corporation
3855 Lakewood Blvd.
Building 1A MC D001-0097
Long Beach, CA 90846

From: **Haley & Aldrich, Inc.**

Date: **3 February, 2004**

Subject: **Import Soil Evaluation, Use of Soil Source at Clifton and Crescent as Import to Parcel A, Boeing Realty Corporation, Former C-6 Facility – Parcel A, Los Angeles, California**

Haley & Aldrich, Inc. is herein providing this technical memorandum to summarize our recommendations regarding the use of an identified potential soil source, herein referred to as Source Clifton and Crescent, as import to Parcel A of the Boeing Realty Corporation's (BRC's) Former C-6 Facility in Los Angeles, California (Site). Based on our review of the environmental information provided for the Clifton and Crescent import soil, this soil may be used as fill soil on Parcel A.

OVERVIEW/PURPOSE

A source of soil, totaling up to approximately 5,000 cubic yards, has been identified as potential import soil for use on Parcel A. Haley & Aldrich staff collected one representative soil sample from Source Clifton and Crescent and analyzed this sample in accordance with the protocol presented in the December 11, 2000 Import Soil Screening Program Plan prepared for Parcel C. The sample was taken in-situ from the northeast corner of the excavation approximately 10 feet below ground surface (bgs). This plan has been used as guidance to evaluate import soil from "off-Site" sources. The criteria presented in the plan were then compared to the analytical results of the soil sample. The purpose of this technical memorandum is to present a summary of the evaluation of the Source Clifton and Crescent soil and to provide recommendations for use as import fill for Parcel A.

LOCATION OF PROPOSED SOURCE CLIFTON AND CRESCENT IMPORT SOIL

The Source Clifton and Crescent potential import soil comprises approximately 5,000 cubic yards. Of this amount we propose to import approximately 2,000 cubic yards of soil to use as backfill for Parcel A. The

soil is located at the North corner of Clifton Way and North Crescent Drive in Beverly Hills, California. This soil will be excavated from beneath an existing residential apartment building. This property has reportedly been used as residential property with use as agricultural land prior to that.

COMPARISON OF ANALYTICAL RESULTS TO IMPORT SOIL GUIDANCE CRITERIA

The laboratory report for the soil sample collected from the subject potential source is presented as Attachment 1. The sample was analyzed for Title 22 metals, and various organic chemicals, including total petroleum hydrocarbons (TPHs), polynuclear aromatic hydrocarbons (PAHs), pesticides, polychlorinated biphenyls (PCBs) and volatile organic compounds (VOCs). A review of the laboratory results indicates that the organic chemical results are all below laboratory detection limits. A summary of the detected metals and their associated Site-specific soil import criteria are presented in Table 1.

Only one metal, molybdenum, was detected above the Southern California maximum regional background criteria. The result for molybdenum, 1.8 mg/kg, is below the Site-specific import soil criterion for this metal of 2.7 mg/kg.

RECOMMENDATIONS FOR USE AS IMPORT SOIL

Based on the results presented above, it is recommended that Source Clifton and Crescent be used as fill soil on Parcel A. The reported soil concentrations for organic compounds are consistent with the Site-specific criteria, and those for inorganic chemicals are consistent with the Site-specific and/or southern California background criteria, with the exception of molybdenum. Because the result for molybdenum is below the Site-specific import soil criteria it can be considered representative of background metals concentrations for the general geographic region from which these soils originated. In addition, the property from which the Source Clifton and Crescent soils originated has reportedly not been used for industrial activities, the sample as collected from an average depth, and no other typical indicators of contamination were present in the sample.

Sincerely yours,
HALEY & ALDRICH, INC.

Anita Broughton, CIH
Risk Assessment Task Manager

THE AMERICAN BOARD OF INDUSTRIAL HYGIENE
INCORPORATED
CERT. NO. 5682 CP
EXPIRES 12-31-2004
PENNSYLVANIA - 1960
ANITA BRENCE BROUGHTON, CIH

Scott Zachary
Project Manager

Attachments:

Appendix A - Laboratory Report for Sample Taken at Crescent and Clifton
Appendix B - Table 1 Summary of Metals Results Listed With Site-Specific Import Soil Criteria and Southern California Import Soil Criteria

Appendix A

Laboratory Report for Sample Taken at Crescent and Clifton

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 1/16/2004	Chain of Custody Number: 142196
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: ~~E4A~~ 160287	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: T. HAMMOND	Lab Contact: D. SUZUKI	
Project Name and Location (State): CG PARCEL A	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28882-403			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Other	Containers & Preservatives: ~~Unpres.~~ 4oz JAR	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	ENCORE	Analysis (Attach list if more space is needed): 8260 (5035)	8015	8310	6010/7471	8270	8081 PESTICIDES							Special Instructions/ Conditions of Receipt
IMPORT_SOIL_CRESCENT_CLIFTON	1/16/04	8:30				X		3						3	X	X	X	X	X	X							24 HR TAT
TB-HA011604-0001	1/16/04	—		X							3																HOLD

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

1. Relinquished By	Date: 1/16/04	Time: 12:30	1. Received By	Date: 01/16/04	Time: 1230
2. Relinquished By	Date:	Time:	2. Received By	Date:	Time:
3. Relinquished By	Date:	Time:	3. Received By	Date:	Time:

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

BOE-C6-0009211

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST

Date: 01/16/04

LIMS Lot #: E4A160287 Quote #: 42295

Client Name: H&A Project: Boeing C6

Received by: AB Date/Time Received: 01/16/04 @ 1230

Delivered by : ☑ Client ☐ STL ☐ Airborne ☐ Fed Ex ☐ UPS ☐ Other

	Initial / Date
Custody Seal Status Cooler: ☐ Intact ☐ Broken ☑ None	AB 01/16/04
Custody Seal Status Samples: ☐ Intact ☐ Broken ☑ None	
Custody Seal #(s): ☐ No Seal #	
Sampler Signature on COC ☐ Yes ☐ No ☑ N/A	
IR Gun # A Correction Factor 0 °C IR passed daily verification ☐ Yes ☐ No	✓
Temperature - BLANK 13.3 °C +/- 0 CF = ____ °C	AB 01/16/04
Temperature – COOLER (____ °C ____ °C ____ °C ____ °C) = ____ avg °C +/- 0 CF = ____ °C	
Samples outside temperature criteria but received within 6 hours of final sampling ☑ Yes ☐ N/A	
Sample Container(s): ☑ STL-LA ☐ Client	
One COC/Multiple coolers: ☐ Yes- # coolers ____ All within temp criteria ☐ Yes ☐ No ☑ N/A	
One or more coolers with an anomaly: ☐ Yes – (fill out PRC for each) ☑ N/A	
Samples: ☑ Intact ☐ Broken ☐ Other	
pH measured: ☐ Yes ☐ Anomaly (if checked, notify lab and file NCM) ☑ N/A	
Anomalies: ☐ No ☐ Yes – complete CUR and Create NCM NCM #	
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☑ Yes ☐ N/A	✓
Labeled by: Anh Bui Labeling checked	

Turn Around Time: ☑ RUSH–24HR ☐ RUSH–48HR ☐ RUSH–72HR ☐ NORMAL ..... AB 01/16/04

Short-Hold Notification: ☐ pH ☐ Wet Chem ☐ Metals (Filter/Pres) ☒ Encore ☐ >1/2 HT expired... Q 01.16.04

Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____

_____

_____

********* LEAVE NO BLANK SPACES ; USE N/A *********

Headspace Anomaly ☒ N/A

Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm
		☐ > 5mm ☐ < 5mm			☐ > 5mm ☐ < 5mm

LIMS Lot # EAA 160287

PROJECT RECEIPT CHECKLIST Cont'd

Fraction	1	2												pH
VOAH/ *		3												—
40 CGJ	3													—
En(5)	2													—
En(25)	1													

* VOA with headspace/bubbles
H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore
AGB: Amber Glass Bottle, n/f/l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

Condition Upon Receipt Anomaly Form

☒ N/A _____

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking
  - ☐ Other:
- **CUSTODY SEALS (COOLER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **CONTAINER(S)**
  - ☐ None
  - ☐ Not Intact
  - ☐ Other
- **TEMPERATURE (SPECS 4 ± 2°C)**
  - ☐ Cooler Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by Client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ Other ☐ COC not received – notify PM
- **CONTAINERS**
  - ☐ Leaking
  - ☐ Broken
  - ☐ Extra
  - ☐ Without Labels
  - ☐ Other:
- **LABELS**
  - ☐ Not the same ID/info as in COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
  - ☐ Torn
- **SAMPLES**
  - ☐ Samples NOT RECEIVED but listed on COC
  - ☐ Samples received but NOT LISTED on COC
  - ☐ Logged based on Label Information
  - ☐ Logged based on info from other samples on COC
  - ☐ Logged according to Work Plan
  - ☐ Logged on HOLD UNTIL FURTHER NOTICE
  - ☐ Will be noted on COC--Client to send samples with new COC
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Improper container used
  - ☐ Not preserved/Improper preservative used
  - ☐ Improper pH _____ Lab to preserve sample and document
  - ☐ Insufficient quantities for analysis ☐ Other

Comments:

_____

_____

_____

_____

_____

☐ Corrective Action Implemented:

☐ Client Informed: verbally on _____ By: _____ ☐ In writing on _____ By: _____

☐ Sample(s) on hold until: _____ ☐ Sample(s) processed "as is."

Logged by/Date:	Log Review/Date:	PM Review/Date:
AB 01/16/04	[signature] 1/16/04	[signature] 01-16-04

EXECUTIVE SUMMARY - Detection Highlights

E4A160287

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
IMPORT_SOIL_CRESCENT_CLIFTON 01/16/04 08:30 001				
Aluminum	12600	20.0	mg/kg	SW846 6010B
Arsenic	11.5	1.0	mg/kg	SW846 6010B
Barium	72.5 J	2.0	mg/kg	SW846 6010B
Cadmium	0.60	0.50	mg/kg	SW846 6010B
Chromium	31.8	1.0	mg/kg	SW846 6010B
Beryllium	0.52	0.50	mg/kg	SW846 6010B
Lead	2.9	0.50	mg/kg	SW846 6010B
Selenium	1.4	0.50	mg/kg	SW846 6010B
Cobalt	5.9	5.0	mg/kg	SW846 6010B
Copper	19.7	2.5	mg/kg	SW846 6010B
Molybdenum	1.8 B	4.0	mg/kg	SW846 6010B
Nickel	20.5	4.0	mg/kg	SW846 6010B
Vanadium	48.0	5.0	mg/kg	SW846 6010B
Zinc	43.5	2.0	mg/kg	SW846 6010B
Percent Moisture	4.9	0.10	%	MCAWW 160.3 MOD

METHODS SUMMARY

E4A160287

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Organochlorine Pesticides	SW846 8081A	SW846 3550
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
PCBs by SW-846 8082	SW846 8082	SW846 3550B/366
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 8260B	SW846 5035
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E4A160287

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F753M	001	IMPORT_SOIL_CRESCENT_CLIFTON	01/16/04	08:30

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC/MS Volatiles

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M1A4 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:**
Prep Date.....: 01/16/04 **Analysis Date..:** 01/16/04
Prep Batch #...: 4016484 **Analysis Time..:** 14:16
Dilution Factor: 0.86
Analyst ID.....: 004648 **Instrument ID..:** MSN
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	23	ug/kg	14
Benzene	ND	4.5	ug/kg	1.8
Bromobenzene	ND	4.5	ug/kg	1.8
Bromochloromethane	ND	4.5	ug/kg	0.90
Bromoform	ND	4.5	ug/kg	2.7
Bromomethane	ND	9.0	ug/kg	1.8
2-Butanone	ND	23	ug/kg	14
n-Butylbenzene	ND	4.5	ug/kg	1.8
sec-Butylbenzene	ND	4.5	ug/kg	1.8
tert-Butylbenzene	ND	4.5	ug/kg	1.8
Carbon disulfide	ND	4.5	ug/kg	1.8
Carbon tetrachloride	ND	4.5	ug/kg	0.90
Chlorobenzene	ND	4.5	ug/kg	1.8
Dibromochloromethane	ND	4.5	ug/kg	4.5
Bromodichloromethane	ND	4.5	ug/kg	0.90
Chloroethane	ND	9.0	ug/kg	1.8
Chloroform	ND	4.5	ug/kg	0.90
Chloromethane	ND	9.0	ug/kg	2.7
2-Chlorotoluene	ND	4.5	ug/kg	1.8
4-Chlorotoluene	ND	4.5	ug/kg	1.8
1,2-Dibromo-3-chloro-propane	ND	9.0	ug/kg	2.7
1,2-Dibromoethane (EDB)	ND	4.5	ug/kg	2.7
Dibromomethane	ND	4.5	ug/kg	0.90
1,2-Dichlorobenzene	ND	4.5	ug/kg	1.8
1,3-Dichlorobenzene	ND	4.5	ug/kg	1.8
1,4-Dichlorobenzene	ND	4.5	ug/kg	1.8
Dichlorodifluoromethane	ND	9.0	ug/kg	0.90
1,1-Dichloroethane	ND	4.5	ug/kg	0.90
1,2-Dichloroethane	ND	4.5	ug/kg	0.90
1,1-Dichloroethene	ND	4.5	ug/kg	1.8
cis-1,2-Dichloroethene	ND	4.5	ug/kg	1.8
trans-1,2-Dichloroethene	ND	4.5	ug/kg	1.8
1,2-Dichloropropane	ND	4.5	ug/kg	0.90
1,3-Dichloropropane	ND	4.5	ug/kg	2.7
2,2-Dichloropropane	ND	4.5	ug/kg	1.8
1,1-Dichloropropene	ND	4.5	ug/kg	0.90

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC/MS Volatiles

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M1A4 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
cis-1,3-Dichloropropene	ND	4.5	ug/kg	0.90
trans-1,3-Dichloropropene	ND	4.5	ug/kg	2.7
Ethylbenzene	ND	4.5	ug/kg	1.8
Hexachlorobutadiene	ND	4.5	ug/kg	1.8
2-Hexanone	ND	23	ug/kg	9.0
Isopropylbenzene	ND	4.5	ug/kg	1.8
p-Isopropyltoluene	ND	4.5	ug/kg	1.8
Methylene chloride	ND	4.5	ug/kg	2.7
4-Methyl-2-pentanone	ND	23	ug/kg	9.0
Methyl tert-butyl ether	ND	4.5	ug/kg	0.90
Naphthalene	ND	4.5	ug/kg	1.8
n-Propylbenzene	ND	4.5	ug/kg	1.8
Styrene	ND	9.0	ug/kg	1.8
1,1,1,2-Tetrachloroethane	ND	4.5	ug/kg	2.7
1,1,2,2-Tetrachloroethane	ND	4.5	ug/kg	2.7
Tetrachloroethene	ND	4.5	ug/kg	1.8
Toluene	ND	4.5	ug/kg	1.8
1,2,3-Trichlorobenzene	ND	4.5	ug/kg	1.8
1,2,4-Trichloro-benzene	ND	4.5	ug/kg	1.8
1,1,1-Trichloroethane	ND	4.5	ug/kg	0.90
1,1,2-Trichloroethane	ND	4.5	ug/kg	2.7
Trichloroethene	ND	4.5	ug/kg	1.8
Trichlorofluoromethane	ND	9.0	ug/kg	1.8
1,2,3-Trichloropropane	ND	4.5	ug/kg	2.7
1,1,2-Trichlorotrifluoro-ethane	ND	4.5	ug/kg	2.7
1,2,4-Trimethylbenzene	ND	4.5	ug/kg	1.8
1,3,5-Trimethylbenzene	ND	4.5	ug/kg	1.8
Vinyl chloride	ND	9.0	ug/kg	1.8
m-Xylene & p-Xylene	ND	4.5	ug/kg	2.7
o-Xylene	ND	4.5	ug/kg	1.8
Xylenes (total)	ND	4.5	ug/kg	2.7

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	90	(60 - 130)
1,2-Dichloroethane-d4	85	(60 - 140)
Toluene-d8	88	(70 - 130)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC/MS Semivolatiles

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M1AD **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4016270
Prep Date.....: 01/16/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4016559 **Analysis Time..:** 18:35
Dilution Factor: 1
Analyst ID.....: 007050 **Instrument ID..:** MSI
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	330	ug/kg	100
Acenaphthylene	ND	330	ug/kg	100
Anthracene	ND	330	ug/kg	80
Benzo(a)anthracene	ND	330	ug/kg	100
Benzo(b)fluoranthene	ND	330	ug/kg	100
Benzo(k)fluoranthene	ND	330	ug/kg	200
Benzo(ghi)perylene	ND	330	ug/kg	150
Benzo(a)pyrene	ND	330	ug/kg	70
Benzoic acid	ND	1600	ug/kg	500
Benzyl alcohol	ND	330	ug/kg	150
bis(2-Chloroethoxy) methane	ND	330	ug/kg	100
bis(2-Chloroethyl)- ether	ND	330	ug/kg	100
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	110
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	200
4-Bromophenyl phenyl ether	ND	330	ug/kg	80
Butyl benzyl phthalate	ND	330	ug/kg	170
Carbazole	ND	330	ug/kg	80
4-Chloroaniline	ND	330	ug/kg	230
4-Chloro-3-methylphenol	ND	330	ug/kg	100
2-Chloronaphthalene	ND	330	ug/kg	100
2-Chlorophenol	ND	330	ug/kg	150
4-Chlorophenyl phenyl ether	ND	330	ug/kg	90
Chrysene	ND	330	ug/kg	100
Dibenz(a,h)anthracene	ND	330	ug/kg	100
Dibenzofuran	ND	330	ug/kg	90
Di-n-butyl phthalate	ND	330	ug/kg	290
1,2-Dichlorobenzene	ND	330	ug/kg	130
1,3-Dichlorobenzene	ND	330	ug/kg	130
1,4-Dichlorobenzene	ND	330	ug/kg	130
3,3'-Dichlorobenzidine	ND	1600	ug/kg	400
2,4-Dichlorophenol	ND	330	ug/kg	90

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC/MS Semivolatiles

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M1AD **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	330	ug/kg	100
2,4-Dimethylphenol	ND	330	ug/kg	120
Dimethyl phthalate	ND	330	ug/kg	80
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	300
2,4-Dinitrophenol	ND	1600	ug/kg	500
2,4-Dinitrotoluene	ND	330	ug/kg	100
2,6-Dinitrotoluene	ND	330	ug/kg	90
Di-n-octyl phthalate	ND	330	ug/kg	130
Fluoranthene	ND	330	ug/kg	70
Fluorene	ND	330	ug/kg	90
Hexachlorobenzene	ND	330	ug/kg	80
Hexachlorobutadiene	ND	330	ug/kg	100
Hexachlorocyclopentadiene	ND	1600	ug/kg	370
Hexachloroethane	ND	330	ug/kg	130
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	100
Isophorone	ND	330	ug/kg	100
2-Methylnaphthalene	ND	330	ug/kg	90
2-Methylphenol	ND	330	ug/kg	120
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	150
Naphthalene	ND	330	ug/kg	90
2-Nitroaniline	ND	1600	ug/kg	300
3-Nitroaniline	ND	1600	ug/kg	350
4-Nitroaniline	ND	1600	ug/kg	300
Nitrobenzene	ND	330	ug/kg	150
2-Nitrophenol	ND	330	ug/kg	100
4-Nitrophenol	ND	1600	ug/kg	600
N-Nitrosodiphenylamine	ND	330	ug/kg	110
N-Nitrosodi-n-propylamine	ND	330	ug/kg	90
Pentachlorophenol	ND	1600	ug/kg	420
Phenanthrene	ND	330	ug/kg	80
Phenol	ND	330	ug/kg	130
Pyrene	ND	330	ug/kg	120
1,2,4-Trichlorobenzene	ND	330	ug/kg	100
2,4,5-Trichlorophenol	ND	330	ug/kg	100
2,4,6-Trichlorophenol	ND	330	ug/kg	70

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC/MS Semivolatiles

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M1AD **Matrix.....:** SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	70	(35 - 140)
2-Fluorophenol	67	(35 - 125)
2,4,6-Tribromophenol	62	(25 - 135)
Nitrobenzene-d5	67	(35 - 130)
Phenol-d5	69	(35 - 130)
Terphenyl-d14	63	(35 - 150)

HALEY & ALDRICH INC

IMPORT_SOIL_CRESCENT_CLIFTON

GC/MS Semivolatiles

Lot-Sample #: E4A160287-001 **Work Order #:** F753M1AD **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC Volatiles

Lot-Sample #...:	E4A160287-001	**Work Order #...:**	F753M1AC	**Matrix.....:**	SOLID
Date Sampled...:	01/16/04 08:30	**Date Received..:**	01/16/04 12:30	**MS Run #.....:**	4020187
Prep Date.....:	01/16/04	**Analysis Date..:**	01/16/04		
Prep Batch #...:	4020371	**Analysis Time..:**	15:02		
Dilution Factor:	1				
Analyst ID.....:	356074	**Instrument ID..:**	G15		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	85	(70 - 130)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC Semivolatiles

Lot-Sample #...:	E4A160287-001	**Work Order #...:**	F753M1AA	**Matrix.....:**	SOLID
Date Sampled...:	01/16/04 08:30	**Date Received..:**	01/16/04 12:30	**MS Run #.....:**	4016265
Prep Date.....:	01/16/04	**Analysis Date..:**	01/19/04		
Prep Batch #...:	4016556	**Analysis Time..:**	20:58		
Dilution Factor:	1				
Analyst ID.....:	356074	**Instrument ID..:**	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9		**10**	**mg/kg**	**4.0**
C10-C11		**10**	**mg/kg**	**4.0**
C12-C13		**10**	**mg/kg**	**4.0**
C14-C15		**10**	**mg/kg**	**4.0**
C16-C17		**10**	**mg/kg**	**4.0**
C18-C19		**10**	**mg/kg**	**4.0**
C20-C23		**10**	**mg/kg**	**4.0**
C24-C27		**10**	**mg/kg**	**4.0**
C28-C31		**10**	**mg/kg**	**4.0**
C32-C35		**10**	**mg/kg**	**4.0**
C36-C39		**10**	**mg/kg**	**4.0**
C40+		**10**	**mg/kg**	**4.0**
Total Carbon Chain Range		**10**	**mg/kg**	**4.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	95	(60 - 125)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC Semivolatiles

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M2AA **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4020071
Prep Date.....: 01/19/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4020216 **Analysis Time..:** 20:14
Dilution Factor: 1
Analyst ID.....: 356074 **Instrument ID..:** G02
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	4.0
C10-C11	ND	10	mg/kg	4.0
C12-C13	ND	10	mg/kg	4.0
C14-C15	ND	10	mg/kg	4.0
C16-C17	ND	10	mg/kg	4.0
C18-C19	ND	10	mg/kg	4.0
C20-C23	ND	10	mg/kg	4.0
C24-C27	ND	10	mg/kg	4.0
C32-C35	ND	10	mg/kg	4.0
C36-C39	ND	10	mg/kg	4.0
C40+	ND	10	mg/kg	4.0
Total Carbon Chain Range	ND	10	mg/kg	4.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	80	(60 - 125)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC Semivolatiles

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M1A1 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4016267
Prep Date.....: 01/16/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4016557 **Analysis Time..:** 11:29
Dilution Factor: 1
Analyst ID.....: 018568 **Instrument ID..:** G5B
Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	1.7	ug/kg	0.80
alpha-BHC	ND	1.7	ug/kg	0.70
alpha-Chlordane	ND	1.7	ug/kg	1.0
beta-BHC	ND	1.7	ug/kg	0.50
delta-BHC	ND	1.7	ug/kg	0.50
4,4'-DDD	ND	3.3	ug/kg	0.50
4,4'-DDE	ND	3.3	ug/kg	0.50
4,4'-DDT	ND	3.3	ug/kg	0.70
Dieldrin	ND	1.7	ug/kg	1.0
Endrin	ND	3.3	ug/kg	0.60
Endrin aldehyde	ND	6.0	ug/kg	3.4
gamma-BHC (Lindane)	ND	1.7	ug/kg	0.50
gamma-Chlordane	ND	2.0	ug/kg	1.0
Endosulfan I	ND	1.7	ug/kg	1.0
Endosulfan II	ND	3.3	ug/kg	0.50
Endosulfan sulfate	ND	1.7	ug/kg	0.50
Heptachlor	ND	1.7	ug/kg	0.80
Heptachlor epoxide	ND	1.7	ug/kg	0.50
Methoxychlor	ND	17	ug/kg	5.0
Toxaphene	ND	67	ug/kg	35

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97	(35 - 140)
Decachlorobiphenyl	107	(65 - 135)

HALEY & ALDRICH INC

IMPORT_SOIL_CRESCENT_CLIFTON

GC Semivolatiles

Lot-Sample #: E4A160287-001 **Work Order #:** F753M1A1 **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

GC Semivolatiles

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M1DL **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4020280
Prep Date.....: 01/20/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4020574 **Analysis Time..:** 17:23
Dilution Factor: 1
Analyst ID.....: 018568 **Instrument ID..:** G8B
Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	33	ug/kg	20
Aroclor 1221	ND	33	ug/kg	20
Aroclor 1232	ND	33	ug/kg	20
Aroclor 1242	ND	33	ug/kg	20
Aroclor 1248	ND	33	ug/kg	20
Aroclor 1254	ND	33	ug/kg	20
Aroclor 1260	ND	33	ug/kg	20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	108	(60 - 140)
Tetrachloro-m-xylene	105	(50 - 140)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

HPLC

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M1A2 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4016268
Prep Date.....: 01/16/04 **Analysis Date..:** 01/17/04
Prep Batch #...: 4016558 **Analysis Time..:** 14:40
Dilution Factor: 1
Analyst ID.....: 004357 **Instrument ID..:** HPLC1
Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Fluoranthene	ND	5.0	ug/kg	2.0
Fluorene	ND	10	ug/kg	3.0
Acenaphthylene	ND	20	ug/kg	10
Anthracene	ND	5.0	ug/kg	2.0
Benzo(a)anthracene	ND	10	ug/kg	3.0
Benzo(b)fluoranthene	ND	10	ug/kg	5.0
Benzo(k)fluoranthene	ND	5.0	ug/kg	1.0
Benzo(ghi)perylene	ND	5.0	ug/kg	2.0
Benzo(a)pyrene	ND	5.0	ug/kg	2.0
Chrysene	ND	5.0	ug/kg	2.0
Dibenz(a,h)anthracene	ND	15	ug/kg	6.0
Acenaphthene	ND	30	ug/kg	15
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg	2.0
Naphthalene	ND	20	ug/kg	10
Phenanthrene	ND	5.0	ug/kg	2.0
Pyrene	ND	15	ug/kg	6.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	102	(50 - 150)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

TOTAL Metals

Lot-Sample #...: E4A160287-001 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4016462						
Aluminum	**12600**	**20.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AE**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 8.0	
Arsenic	**11.5**	**1.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AF**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16/04	F753M1AG
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.60	
Barium	**72.5 J**	**2.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AH**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.10	
Cadmium	**0.60**	**0.50**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AJ**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.060	
Chromium	**31.8**	**1.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AK**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.10	
Beryllium	**0.52**	**0.50**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AL**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.050	
Lead	**2.9**	**0.50**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AM**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.30	
Selenium	**1.4**	**0.50**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AN**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.40	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

TOTAL Metals

Lot-Sample #...: E4A160287-001 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	01/16/04	F753M1AP
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.10	
Cobalt	**5.9**	**5.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AQ**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.10	
Copper	**19.7**	**2.5**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AR**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.40	
Molybdenum	**1.8 B**	**4.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AT**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.30	
Nickel	**20.5**	**4.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AU**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/16/04	F753M1AV
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.50	
Vanadium	**48.0**	**5.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AW**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 0.10	
Zinc	**43.5**	**2.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F753M1AX**
		Dilution Factor: 1		Analysis Time..: 19:30	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 4016202	MDL.....: 1.0	

Prep Batch #...: 4019225

Mercury	ND	0.10	mg/kg	SW846 7471A	01/19/04	F753M1A0
		Dilution Factor: 1		Analysis Time..: 13:53	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 4020305	MDL.....: 0.020	

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: IMPORT_SOIL_CRESCENT_CLIFTON

General Chemistry

Lot-Sample #...: E4A160287-001 **Work Order #...:** F753M **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**4.9**	**0.10**	**%**	**MCAWW 160.3 MOD**	**01/16-01/17/04**	**4016480**

Dilution Factor: 1 Analysis Time..: 16:45 Analyst ID.....: 021088
Instrument ID..: W15 MS Run #.....: 4016232 MDL.....:

QC DATA ASSOCIATION SUMMARY

E4A160287

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8015B		4016556	4016265
	SOLID	SW846 8015B		4020216	4020071
	SOLID	SW846 8015B		4020371	4020187
	SOLID	SW846 7471A		4019225	4020305
	SOLID	SW846 8082		4020574	4020280
	SOLID	SW846 8081A		4016557	4016267
	SOLID	SW846 8260B		4016484	
	SOLID	SW846 8270C		4016559	4016270
	SOLID	SW846 6010B		4016462	4016202
	SOLID	SW846 8310		4016558	4016268
	SOLID	MCAWW 160.3 MOD		4016480	4016232

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AA **Matrix.....:** SOLID
MB Lot-Sample #: E4A160000-484

Prep Date.....: 01/16/04 **Analysis Time..:** 10:53
Analysis Date..: 01/16/04 **Prep Batch #...:** 4016484 **Instrument ID..:** MSN
Dilution Factor: 1

Analyst ID.....: 004648

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	25	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
Naphthalene	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichlorotrifluoro-ethane	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	91	(60 - 130)
1,2-Dichloroethane-d4	87	(60 - 140)
Toluene-d8	86	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F76VJ1AA **Matrix.....:** SOLID
MB Lot-Sample #: E4A160000-559

Prep Date.....: 01/16/04 **Analysis Time..:** 17:27
Analysis Date..: 01/20/04 **Prep Batch #...:** 4016559 **Instrument ID..:** MSI
Dilution Factor: 1

Analyst ID.....: 007050

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)- ether	ND	330	ug/kg	SW846 8270C
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Carbazole	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F76VJ1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopentadiene	ND	1600	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propylamine	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
1,2,4-Trichlorobenzene	ND	330	ug/kg	SW846 8270C
2,4,5-Trichlorophenol	ND	330	ug/kg	SW846 8270C
2,4,6-Trichlorophenol	ND	330	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	84	(35 - 140)
2-Fluorophenol	81	(35 - 125)
2,4,6-Tribromophenol	75	(25 - 135)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F76VJ1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Nitrobenzene-d5	83	(35 - 130)		
Phenol-d5	80	(35 - 130)		
Terphenyl-d14	73	(35 - 150)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

HALEY & ALDRICH INC

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: E4A160000-559 B **Work Order #:** F76VJ1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F78VC1AA **Matrix.....:** SOLID
MB Lot-Sample #: E4A200000-371

Prep Date.....: 01/16/04 **Analysis Time..:** 12:45
Analysis Date..: 01/16/04 **Prep Batch #...:** 4020371 **Instrument ID..:** G15
Dilution Factor: 1

Analyst ID.....: 356074

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C6-C8	ND	1.0	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	83	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F78E51AA **Matrix.....:** SOLID
MB Lot-Sample #: E4A200000-216

Prep Date.....: 01/19/04 **Analysis Time..:** 18:46
Analysis Date..: 01/19/04 **Prep Batch #...:** 4020216 **Instrument ID..:** G02
Dilution Factor: 1

Analyst ID.....: 356074

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	94	(60 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F76VF1AA **Matrix.....:** SOLID
MB Lot-Sample #: E4A160000-557

Prep Date.....: 01/16/04 **Analysis Time..:** 10:19
Analysis Date..: 01/19/04 **Prep Batch #...:** 4016557 **Instrument ID..:** G5B
Dilution Factor: 1

Analyst ID.....: 018568

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	1.7	ug/kg	SW846 8081A
alpha-BHC	ND	1.7	ug/kg	SW846 8081A
alpha-Chlordane	ND	1.7	ug/kg	SW846 8081A
beta-BHC	ND	1.7	ug/kg	SW846 8081A
delta-BHC	ND	1.7	ug/kg	SW846 8081A
4,4'-DDD	ND	3.3	ug/kg	SW846 8081A
4,4'-DDE	ND	3.3	ug/kg	SW846 8081A
4,4'-DDT	ND	3.3	ug/kg	SW846 8081A
Dieldrin	ND	1.7	ug/kg	SW846 8081A
Endrin	ND	3.3	ug/kg	SW846 8081A
Endrin aldehyde	ND	6.0	ug/kg	SW846 8081A
gamma-BHC (Lindane)	ND	1.7	ug/kg	SW846 8081A
gamma-Chlordane	ND	2.0	ug/kg	SW846 8081A
Endosulfan I	ND	1.7	ug/kg	SW846 8081A
Endosulfan II	ND	3.3	ug/kg	SW846 8081A
Endosulfan sulfate	ND	1.7	ug/kg	SW846 8081A
Heptachlor	ND	1.7	ug/kg	SW846 8081A
Heptachlor epoxide	ND	1.7	ug/kg	SW846 8081A
Methoxychlor	ND	17	ug/kg	SW846 8081A
Toxaphene	ND	67	ug/kg	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(35 - 140)
Decachlorobiphenyl	99	(65 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F79PC1AA **Matrix.....:** SOLID
MB Lot-Sample #: E4A200000-574

Prep Date.....: 01/20/04 **Analysis Time..:** 15:18
Analysis Date..: 01/20/04 **Prep Batch #...:** 4020574 **Instrument ID..:** G8B
Dilution Factor: 1

Analyst ID.....: 018568

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	108	(60 - 140)
Tetrachloro-m-xylene	108	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

HPLC

Client Lot #...: E4A160287 **Work Order #...:** F76VG1AA **Matrix.....:** SOLID
MB Lot-Sample #: E4A160000-558

Prep Date.....: 01/16/04 **Analysis Time..:** 13:36
Analysis Date..: 01/17/04 **Prep Batch #...:** 4016558 **Instrument ID..:** HPLC1
Dilution Factor: 1

Analyst ID.....: 004357

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	30	ug/kg	SW846 8310
Acenaphthylene	ND	20	ug/kg	SW846 8310
Anthracene	ND	5.0	ug/kg	SW846 8310
Benzo(a)anthracene	ND	10	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	10	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	5.0	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	5.0	ug/kg	SW846 8310
Benzo(a)pyrene	ND	5.0	ug/kg	SW846 8310
Chrysene	ND	5.0	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	15	ug/kg	SW846 8310
Fluoranthene	ND	5.0	ug/kg	SW846 8310
Fluorene	ND	10	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg	SW846 8310
Naphthalene	ND	20	ug/kg	SW846 8310
Phenanthrene	ND	5.0	ug/kg	SW846 8310
Pyrene	ND	15	ug/kg	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	108	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E4A160000-462 **Prep Batch #...:** 4016462						
Aluminum	ND	20.0	mg/kg	SW846 6010B	01/16/04	F759D1AA
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	01/16/04	F759D1AC
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	01/16/04	F759D1AD
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Barium	**0.17 B**	**2.0**	**mg/kg**	**SW846 6010B**	**01/16/04**	**F759D1AE**
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	01/16/04	F759D1AF
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Chromium	ND	1.0	mg/kg	SW846 6010B	01/16/04	F759D1AG
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	01/16/04	F759D1AH
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	01/16/04	F759D1AJ
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	01/16/04	F759D1AK
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	01/16/04	F759D1AL
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	01/16/04	F759D1AM
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	ND	2.5	mg/kg	SW846 6010B	01/16/04	F759D1AN
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	01/16/04	F759D1AP
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	01/16/04	F759D1AQ
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	01/16/04	F759D1AR
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	01/16/04	F759D1AT
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	01/16/04	F759D1AU
		Dilution Factor: 1				
		Analysis Time..: 19:10		Analyst ID.....: 021088	Instrument ID..: M01	

MB Lot-Sample #: E4A190000-225 **Prep Batch #...:** 4019225

Mercury	ND	0.10	mg/kg	SW846 7471A	01/19/04	F79TD1AA
		Dilution Factor: 1				
		Analysis Time..: 13:49		Analyst ID.....: 000023	Instrument ID..: M04	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-484 F76E71AD-LCSD
Prep Date.....: 01/16/04 **Analysis Date..:** 01/16/04
Prep Batch #...: 4016484 **Analysis Time..:** 10:12
Dilution Factor: 1 **Instrument ID..:** MSN
Analyst ID.....: 004648

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acetone	86	(50 - 150)			SW846 8260B
	100	(50 - 150)	15	(0-45)	SW846 8260B
Benzene	**97**	**(70 - 130)**			**SW846 8260B**
	98	**(70 - 130)**	**1.0**	**(0-30)**	**SW846 8260B**
Bromobenzene	99	(70 - 140)			SW846 8260B
	97	(70 - 140)	2.7	(0-35)	SW846 8260B
Bromochloromethane	92	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.5	(0-30)	SW846 8260B
Bromoform	93	(70 - 130)			SW846 8260B
	98	(70 - 130)	5.6	(0-30)	SW846 8260B
Bromomethane	111	(50 - 150)			SW846 8260B
	108	(50 - 150)	2.7	(0-35)	SW846 8260B
2-Butanone	92	(60 - 140)			SW846 8260B
	102	(60 - 140)	9.7	(0-35)	SW846 8260B
n-Butylbenzene	98	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.7	(0-30)	SW846 8260B
sec-Butylbenzene	100	(70 - 130)			SW846 8260B
	97	(70 - 130)	3.5	(0-30)	SW846 8260B
tert-Butylbenzene	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.8	(0-30)	SW846 8260B
Carbon disulfide	103	(60 - 140)			SW846 8260B
	104	(60 - 140)	0.50	(0-35)	SW846 8260B
t-Butanol	65	(40 - 150)			SW846 8260B
	74	(40 - 150)	12	(0-35)	SW846 8260B
Carbon tetrachloride	98	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.9	(0-30)	SW846 8260B
Chlorobenzene	**96**	**(70 - 130)**			**SW846 8260B**
	94	**(70 - 130)**	**1.5**	**(0-30)**	**SW846 8260B**
Dibromochloromethane	92	(70 - 130)			SW846 8260B
	94	(70 - 130)	2.0	(0-30)	SW846 8260B
Bromodichloromethane	99	(70 - 130)			SW846 8260B
	103	(70 - 130)	4.1	(0-30)	SW846 8260B
Chloroethane	101	(40 - 150)			SW846 8260B
	99	(40 - 150)	2.3	(0-35)	SW846 8260B
Chloroform	98	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.7	(0-30)	SW846 8260B
Chloromethane	110	(50 - 150)			SW846 8260B
	114	(50 - 150)	3.6	(0-35)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-484 F76E71AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Chlorotoluene	101	(70 - 130)			SW846 8260B
	99	(70 - 130)	2.3	(0-30)	SW846 8260B
4-Chlorotoluene	96	(70 - 130)			SW846 8260B
	93	(70 - 130)	3.2	(0-30)	SW846 8260B
1,2-Dibromo-3-chloro-propane	96	(60 - 140)			SW846 8260B
	101	(60 - 140)	5.2	(0-35)	SW846 8260B
1,2-Dibromoethane (EDB)	94	(70 - 130)			SW846 8260B
	99	(70 - 130)	4.7	(0-30)	SW846 8260B
Dibromomethane	100	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.7	(0-30)	SW846 8260B
1,2-Dichlorobenzene	96	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.2	(0-30)	SW846 8260B
1,3-Dichlorobenzene	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.0	(0-30)	SW846 8260B
1,4-Dichlorobenzene	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	2.4	(0-30)	SW846 8260B
Dichlorodifluoromethane	158	(40 - 160)			SW846 8260B
	158	(40 - 160)	0.43	(0-35)	SW846 8260B
1,1-Dichloroethane	97	(70 - 130)			SW846 8260B
	97	(70 - 130)	0.28	(0-30)	SW846 8260B
1,2-Dichloroethane	100	(70 - 130)			SW846 8260B
	101	(70 - 130)	1.5	(0-30)	SW846 8260B
1,1-Dichloroethene	**97**	**(65 - 150)**			**SW846 8260B**
	95	**(65 - 150)**	**2.0**	**(0-30)**	**SW846 8260B**
cis-1,2-Dichloroethene	93	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.8	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	92	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.9	(0-30)	SW846 8260B
1,2-Dichloropropane	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	1.5	(0-30)	SW846 8260B
1,3-Dichloropropane	96	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.3	(0-30)	SW846 8260B
2,2-Dichloropropane	104	(70 - 130)			SW846 8260B
	105	(70 - 130)	1.6	(0-30)	SW846 8260B
1,1-Dichloropropene	112	(70 - 130)			SW846 8260B
	115	(70 - 130)	2.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	99	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.98	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	93	(70 - 130)			SW846 8260B
	98	(70 - 130)	4.9	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-484 F76E71AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Ethylbenzene	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.6	(0-30)	SW846 8260B
Hexachlorobutadiene	103	(70 - 130)			SW846 8260B
	98	(70 - 130)	5.1	(0-30)	SW846 8260B
2-Hexanone	89	(60 - 140)			SW846 8260B
	99	(60 - 140)	11	(0-35)	SW846 8260B
Isopropylbenzene	87	(70 - 130)			SW846 8260B
	85	(70 - 130)	2.8	(0-30)	SW846 8260B
p-Isopropyltoluene	96	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.4	(0-30)	SW846 8260B
Methylene chloride	90	(70 - 130)			SW846 8260B
	95	(70 - 130)	5.9	(0-30)	SW846 8260B
4-Methyl-2-pentanone	92	(60 - 140)			SW846 8260B
	101	(60 - 140)	9.2	(0-35)	SW846 8260B
Methyl tert-butyl ether	93	(70 - 130)			SW846 8260B
	97	(70 - 130)	4.2	(0-30)	SW846 8260B
Naphthalene	95	(60 - 140)			SW846 8260B
	100	(60 - 140)	4.9	(0-35)	SW846 8260B
n-Propylbenzene	99	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.8	(0-30)	SW846 8260B
Styrene	94	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.93	(0-30)	SW846 8260B
1,1,1,2-Tetrachloroethane	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.060	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	93	(70 - 130)			SW846 8260B
	96	(70 - 130)	4.0	(0-30)	SW846 8260B
Tetrachloroethene	100	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.8	(0-30)	SW846 8260B
Toluene	**95**	**(70 - 130)**			**SW846 8260B**
	93	**(70 - 130)**	**2.5**	**(0-30)**	**SW846 8260B**
1,2,3-Trichlorobenzene	102	(70 - 130)			SW846 8260B
	103	(70 - 130)	0.88	(0-30)	SW846 8260B
1,2,4-Trichloro-benzene	104	(70 - 130)			SW846 8260B
	102	(70 - 130)	1.3	(0-30)	SW846 8260B
1,1,1-Trichloroethane	98	(70 - 130)			SW846 8260B
	98	(70 - 130)	0.61	(0-30)	SW846 8260B
1,1,2-Trichloroethane	97	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.4	(0-30)	SW846 8260B
Trichloroethene	**101**	**(70 - 135)**			**SW846 8260B**
	101	**(70 - 135)**	**0.23**	**(0-30)**	**SW846 8260B**

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-484 F76E71AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Trichlorofluoromethane	105	(70 - 130)			SW846 8260B
	106	(70 - 130)	1.2	(0-35)	SW846 8260B
1,2,3-Trichloropropane	96	(70 - 130)			SW846 8260B
	99	(70 - 130)	3.8	(0-35)	SW846 8260B
1,1,2-Trichlorotrifluoro-ethane	110	(70 - 130)			SW846 8260B
	109	(70 - 130)	0.53	(0-35)	SW846 8260B
1,2,4-Trimethylbenzene	103	(70 - 130)			SW846 8260B
	100	(70 - 130)	3.4	(0-35)	SW846 8260B
1,3,5-Trimethylbenzene	96	(70 - 130)			SW846 8260B
	93	(70 - 130)	3.6	(0-35)	SW846 8260B
Vinyl chloride	113	(60 - 140)			SW846 8260B
	113	(60 - 140)	0.030	(0-35)	SW846 8260B
m-Xylene & p-Xylene	93	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.3	(0-30)	SW846 8260B
Isopropyl ether	102	(70 - 130)			SW846 8260B
	106	(70 - 130)	3.9	(0-30)	SW846 8260B
o-Xylene	94	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.4	(0-30)	SW846 8260B
Tert-amyl methyl ether	105	(70 - 130)			SW846 8260B
	109	(70 - 130)	4.2	(0-30)	SW846 8260B
Tert-butyl ethyl ether	107	(70 - 130)			SW846 8260B
	110	(70 - 130)	2.6	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	89	(60 - 130)
	89	(60 - 130)
1,2-Dichloroethane-d4	84	(60 - 140)
	87	(60 - 140)
Toluene-d8	90	(70 - 130)
	87	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-484 F76E71AD-LCSD
Prep Date.....: 01/16/04 **Analysis Date..:** 01/16/04
Prep Batch #...: 4016484 **Analysis Time..:** 10:12
Dilution Factor: 1 **Instrument ID..:** MSN
Analyst ID.....: 004648

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acetone	250	214	ug/kg	86		SW846 8260B
	250	250	ug/kg	100	15	SW846 8260B
Benzene	**50.0**	**48.3**	**ug/kg**	**97**		**SW846 8260B**
	50.0	**48.8**	**ug/kg**	**98**	**1.0**	**SW846 8260B**
Bromobenzene	50.0	49.7	ug/kg	99		SW846 8260B
	50.0	48.3	ug/kg	97	2.7	SW846 8260B
Bromochloromethane	50.0	45.8	ug/kg	92		SW846 8260B
	50.0	45.2	ug/kg	90	1.5	SW846 8260B
Bromoform	50.0	46.6	ug/kg	93		SW846 8260B
	50.0	49.2	ug/kg	98	5.6	SW846 8260B
Bromomethane	50.0	55.6	ug/kg	111		SW846 8260B
	50.0	54.1	ug/kg	108	2.7	SW846 8260B
2-Butanone	250	230	ug/kg	92		SW846 8260B
	250	254	ug/kg	102	9.7	SW846 8260B
n-Butylbenzene	50.0	48.8	ug/kg	98		SW846 8260B
	50.0	46.6	ug/kg	93	4.7	SW846 8260B
sec-Butylbenzene	50.0	50.2	ug/kg	100		SW846 8260B
	50.0	48.5	ug/kg	97	3.5	SW846 8260B
tert-Butylbenzene	50.0	48.7	ug/kg	97		SW846 8260B
	50.0	47.3	ug/kg	95	2.8	SW846 8260B
Carbon disulfide	250	259	ug/kg	103		SW846 8260B
	250	260	ug/kg	104	0.50	SW846 8260B
t-Butanol	250	164	ug/kg	65		SW846 8260B
	250	184	ug/kg	74	12	SW846 8260B
Carbon tetrachloride	50.0	48.8	ug/kg	98		SW846 8260B
	50.0	49.8	ug/kg	100	1.9	SW846 8260B
Chlorobenzene	**50.0**	**47.9**	**ug/kg**	**96**		**SW846 8260B**
	50.0	**47.2**	**ug/kg**	**94**	**1.5**	**SW846 8260B**
Dibromochloromethane	50.0	46.1	ug/kg	92		SW846 8260B
	50.0	47.0	ug/kg	94	2.0	SW846 8260B
Bromodichloromethane	50.0	49.4	ug/kg	99		SW846 8260B
	50.0	51.5	ug/kg	103	4.1	SW846 8260B
Chloroethane	50.0	50.5	ug/kg	101		SW846 8260B
	50.0	49.4	ug/kg	99	2.3	SW846 8260B
Chloroform	50.0	49.0	ug/kg	98		SW846 8260B
	50.0	49.8	ug/kg	100	1.7	SW846 8260B
Chloromethane	50.0	55.0	ug/kg	110		SW846 8260B
	50.0	57.0	ug/kg	114	3.6	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-484 F76E71AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
2-Chlorotoluene	50.0	50.5	ug/kg	101		SW846 8260B
	50.0	49.3	ug/kg	99	2.3	SW846 8260B
4-Chlorotoluene	50.0	48.1	ug/kg	96		SW846 8260B
	50.0	46.6	ug/kg	93	3.2	SW846 8260B
1,2-Dibromo-3-chloro-propane	50.0	47.9	ug/kg	96		SW846 8260B
	50.0	50.4	ug/kg	101	5.2	SW846 8260B
1,2-Dibromoethane (EDB)	50.0	47.0	ug/kg	94		SW846 8260B
	50.0	49.3	ug/kg	99	4.7	SW846 8260B
Dibromomethane	50.0	49.9	ug/kg	100		SW846 8260B
	50.0	50.8	ug/kg	102	1.7	SW846 8260B
1,2-Dichlorobenzene	50.0	48.0	ug/kg	96		SW846 8260B
	50.0	47.4	ug/kg	95	1.2	SW846 8260B
1,3-Dichlorobenzene	50.0	48.8	ug/kg	98		SW846 8260B
	50.0	47.9	ug/kg	96	2.0	SW846 8260B
1,4-Dichlorobenzene	50.0	50.0	ug/kg	100		SW846 8260B
	50.0	48.8	ug/kg	98	2.4	SW846 8260B
Dichlorodifluoromethane	50.0	79.2	ug/kg	158		SW846 8260B
	50.0	78.9	ug/kg	158	0.43	SW846 8260B
1,1-Dichloroethane	50.0	48.3	ug/kg	97		SW846 8260B
	50.0	48.4	ug/kg	97	0.28	SW846 8260B
1,2-Dichloroethane	50.0	49.8	ug/kg	100		SW846 8260B
	50.0	50.5	ug/kg	101	1.5	SW846 8260B
1,1-Dichloroethene	**50.0**	**48.4**	**ug/kg**	**97**		**SW846 8260B**
	50.0	**47.5**	**ug/kg**	**95**	**2.0**	**SW846 8260B**
cis-1,2-Dichloroethene	50.0	46.7	ug/kg	93		SW846 8260B
	50.0	47.5	ug/kg	95	1.8	SW846 8260B
trans-1,2-Dichloroethene	50.0	46.1	ug/kg	92		SW846 8260B
	50.0	47.5	ug/kg	95	2.9	SW846 8260B
1,2-Dichloropropane	50.0	49.4	ug/kg	99		SW846 8260B
	50.0	50.1	ug/kg	100	1.5	SW846 8260B
1,3-Dichloropropane	50.0	47.8	ug/kg	96		SW846 8260B
	50.0	48.4	ug/kg	97	1.3	SW846 8260B
2,2-Dichloropropane	50.0	51.8	ug/kg	104		SW846 8260B
	50.0	52.6	ug/kg	105	1.6	SW846 8260B
1,1-Dichloropropene	50.0	56.2	ug/kg	112		SW846 8260B
	50.0	57.4	ug/kg	115	2.2	SW846 8260B
cis-1,3-Dichloropropene	50.0	49.4	ug/kg	99		SW846 8260B
	50.0	49.9	ug/kg	100	0.98	SW846 8260B
trans-1,3-Dichloropropene	50.0	46.6	ug/kg	93		SW846 8260B
	50.0	49.0	ug/kg	98	4.9	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-484 F76E71AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Ethylbenzene	50.0	48.4	ug/kg	97		SW846 8260B
	50.0	47.6	ug/kg	95	1.6	SW846 8260B
Hexachlorobutadiene	50.0	51.5	ug/kg	103		SW846 8260B
	50.0	49.0	ug/kg	98	5.1	SW846 8260B
2-Hexanone	250	222	ug/kg	89		SW846 8260B
	250	247	ug/kg	99	11	SW846 8260B
Isopropylbenzene	50.0	43.6	ug/kg	87		SW846 8260B
	50.0	42.4	ug/kg	85	2.8	SW846 8260B
p-Isopropyltoluene	50.0	48.2	ug/kg	96		SW846 8260B
	50.0	46.1	ug/kg	92	4.4	SW846 8260B
Methylene chloride	50.0	45.0	ug/kg	90		SW846 8260B
	50.0	47.7	ug/kg	95	5.9	SW846 8260B
4-Methyl-2-pentanone	250	229	ug/kg	92		SW846 8260B
	250	251	ug/kg	101	9.2	SW846 8260B
Methyl tert-butyl ether	50.0	46.3	ug/kg	93		SW846 8260B
	50.0	48.3	ug/kg	97	4.2	SW846 8260B
Naphthalene	50.0	47.6	ug/kg	95		SW846 8260B
	50.0	50.0	ug/kg	100	4.9	SW846 8260B
n-Propylbenzene	50.0	49.6	ug/kg	99		SW846 8260B
	50.0	47.8	ug/kg	96	3.8	SW846 8260B
Styrene	50.0	47.1	ug/kg	94		SW846 8260B
	50.0	46.7	ug/kg	93	0.93	SW846 8260B
1,1,1,2-Tetrachloroethane	50.0	49.0	ug/kg	98		SW846 8260B
	50.0	49.0	ug/kg	98	0.060	SW846 8260B
1,1,2,2-Tetrachloroethane	50.0	46.3	ug/kg	93		SW846 8260B
	50.0	48.2	ug/kg	96	4.0	SW846 8260B
Tetrachloroethene	50.0	49.8	ug/kg	100		SW846 8260B
	50.0	47.9	ug/kg	96	3.8	SW846 8260B
Toluene	**50.0**	**47.7**	**ug/kg**	**95**		**SW846 8260B**
	50.0	**46.5**	**ug/kg**	**93**	**2.5**	**SW846 8260B**
1,2,3-Trichlorobenzene	50.0	50.9	ug/kg	102		SW846 8260B
	50.0	51.3	ug/kg	103	0.88	SW846 8260B
1,2,4-Trichloro-benzene	50.0	51.9	ug/kg	104		SW846 8260B
	50.0	51.2	ug/kg	102	1.3	SW846 8260B
1,1,1-Trichloroethane	50.0	48.8	ug/kg	98		SW846 8260B
	50.0	49.1	ug/kg	98	0.61	SW846 8260B
1,1,2-Trichloroethane	50.0	48.4	ug/kg	97		SW846 8260B
	50.0	49.1	ug/kg	98	1.4	SW846 8260B
Trichloroethene	**50.0**	**50.4**	**ug/kg**	**101**		**SW846 8260B**
	50.0	**50.5**	**ug/kg**	**101**	**0.23**	**SW846 8260B**

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F76E71AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-484 F76E71AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Trichlorofluoromethane	50.0	52.3	ug/kg	105		SW846 8260B
	50.0	53.0	ug/kg	106	1.2	SW846 8260B
1,2,3-Trichloropropane	50.0	47.8	ug/kg	96		SW846 8260B
	50.0	49.6	ug/kg	99	3.8	SW846 8260B
1,1,2-Trichlorotrifluoro-ethane	50.0	54.8	ug/kg	110		SW846 8260B
	50.0	54.5	ug/kg	109	0.53	SW846 8260B
1,2,4-Trimethylbenzene	50.0	51.5	ug/kg	103		SW846 8260B
	50.0	49.8	ug/kg	100	3.4	SW846 8260B
1,3,5-Trimethylbenzene	50.0	48.2	ug/kg	96		SW846 8260B
	50.0	46.5	ug/kg	93	3.6	SW846 8260B
Vinyl chloride	50.0	56.4	ug/kg	113		SW846 8260B
	50.0	56.4	ug/kg	113	0.030	SW846 8260B
m-Xylene & p-Xylene	100	92.6	ug/kg	93		SW846 8260B
	100	90.5	ug/kg	91	2.3	SW846 8260B
Isopropyl ether	50.0	50.8	ug/kg	102		SW846 8260B
	50.0	52.9	ug/kg	106	3.9	SW846 8260B
o-Xylene	50.0	47.0	ug/kg	94		SW846 8260B
	50.0	46.4	ug/kg	93	1.4	SW846 8260B
Tert-amyl methyl ether	50.0	52.3	ug/kg	105		SW846 8260B
	50.0	54.5	ug/kg	109	4.2	SW846 8260B
Tert-butyl ethyl ether	50.0	53.6	ug/kg	107		SW846 8260B
	50.0	54.9	ug/kg	110	2.6	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	89	(60 - 130)
	89	(60 - 130)
1,2-Dichloroethane-d4	84	(60 - 140)
	87	(60 - 140)
Toluene-d8	90	(70 - 130)
	87	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F76VJ1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-559
Prep Date.....: 01/16/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4016559 **Analysis Time..:** 19:09
Dilution Factor: 1 **Instrument ID..:** MSI
Analyst ID.....: 007050

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**80**	**(50 - 130)**	**SW846 8270C**
4-Chloro-3-methylphenol	**84**	**(50 - 120)**	**SW846 8270C**
2-Chlorophenol	**76**	**(45 - 125)**	**SW846 8270C**
1,4-Dichlorobenzene	**71**	**(35 - 115)**	**SW846 8270C**
2,4-Dinitrotoluene	**87**	**(40 - 125)**	**SW846 8270C**
4-Nitrophenol	**88**	**(10 - 120)**	**SW846 8270C**
N-Nitrosodi-n-propyl-amine	**77**	**(40 - 125)**	**SW846 8270C**
Pentachlorophenol	**79**	**(20 - 130)**	**SW846 8270C**
Phenol	**77**	**(40 - 110)**	**SW846 8270C**
Pyrene	**76**	**(50 - 145)**	**SW846 8270C**
1,2,4-Trichloro-benzene	**73**	**(50 - 120)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	80	(35 - 140)
2-Fluorophenol	79	(35 - 125)
2,4,6-Tribromophenol	88	(25 - 135)
Nitrobenzene-d5	76	(35 - 130)
Phenol-d5	80	(35 - 130)
Terphenyl-d14	70	(35 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F76VJ1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-559
Prep Date.....: 01/16/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4016559 **Analysis Time..:** 19:09
Dilution Factor: 1 **Instrument ID..:** MSI
Analyst ID.....: 007050

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Acenaphthene	**3330**	**2680**	**ug/kg**	**80**	**SW846 8270C**
4-Chloro-3-methylphenol	**3330**	**2790**	**ug/kg**	**84**	**SW846 8270C**
2-Chlorophenol	**3330**	**2540**	**ug/kg**	**76**	**SW846 8270C**
1,4-Dichlorobenzene	**3330**	**2380**	**ug/kg**	**71**	**SW846 8270C**
2,4-Dinitrotoluene	**3330**	**2910**	**ug/kg**	**87**	**SW846 8270C**
4-Nitrophenol	**3330**	**2940**	**ug/kg**	**88**	**SW846 8270C**
N-Nitrosodi-n-propyl-amine	**3330**	**2550**	**ug/kg**	**77**	**SW846 8270C**
Pentachlorophenol	**3330**	**2620**	**ug/kg**	**79**	**SW846 8270C**
Phenol	**3330**	**2580**	**ug/kg**	**77**	**SW846 8270C**
Pyrene	**3330**	**2550**	**ug/kg**	**76**	**SW846 8270C**
1,2,4-Trichloro-benzene	**3330**	**2440**	**ug/kg**	**73**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	80	(35 - 140)
2-Fluorophenol	79	(35 - 125)
2,4,6-Tribromophenol	88	(25 - 135)
Nitrobenzene-d5	76	(35 - 130)
Phenol-d5	80	(35 - 130)
Terphenyl-d14	70	(35 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F78VC1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A200000-371
Prep Date.....: 01/16/04 **Analysis Date..:** 01/16/04
Prep Batch #...: 4020371 **Analysis Time..:** 13:13
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	**81**	**(65 - 135)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	99	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F78VC1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A200000-371
Prep Date.....: 01/16/04 **Analysis Date..:** 01/16/04
Prep Batch #...: 4020371 **Analysis Time..:** 13:13
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	**5.00**	**4.03**	**mg/kg**	**81**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	99	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F78E51AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A200000-216
Prep Date.....: 01/19/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4020216 **Analysis Time..:** 19:30
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**100**	**(55 - 125)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	92	(60 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F78E51AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A200000-216
Prep Date.....: 01/19/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4020216 **Analysis Time..:** 19:30
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	**250**	**251**	**mg/kg**	**100**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	92	(60 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F76VF1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-557
Prep Date.....: 01/16/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4016557 **Analysis Time..:** 10:54
Dilution Factor: 1 **Instrument ID..:** G5B
Analyst ID.....: 018568

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aldrin	**82**	**(50 - 130)**	**SW846 8081A**
4,4'-DDT	**92**	**(75 - 125)**	**SW846 8081A**
Dieldrin	**89**	**(75 - 125)**	**SW846 8081A**
Endrin	**90**	**(70 - 135)**	**SW846 8081A**
gamma-BHC (Lindane)	**86**	**(70 - 125)**	**SW846 8081A**
Heptachlor	**86**	**(70 - 130)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(35 - 140)
Decachlorobiphenyl	95	(65 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F76VF1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-557
Prep Date.....: 01/16/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4016557 **Analysis Time..:** 10:54
Dilution Factor: 1 **Instrument ID..:** G5B
Analyst ID.....: 018568

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Aldrin	**6.67**	**5.44**	**ug/kg**	**82**	**SW846 8081A**
4,4'-DDT	**13.3**	**12.2**	**ug/kg**	**92**	**SW846 8081A**
Dieldrin	**13.3**	**11.8**	**ug/kg**	**89**	**SW846 8081A**
Endrin	**13.3**	**12.0**	**ug/kg**	**90**	**SW846 8081A**
gamma-BHC (Lindane)	**6.67**	**5.77**	**ug/kg**	**86**	**SW846 8081A**
Heptachlor	**6.67**	**5.72**	**ug/kg**	**86**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(35 - 140)
Decachlorobiphenyl	95	(65 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F79PC1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A200000-574
Prep Date.....: 01/20/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4020574 **Analysis Time..:** 16:00
Dilution Factor: 1 **Instrument ID..:** G8B
Analyst ID.....: 018568

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1016	**98**	**(60 - 135)**	**SW846 8082**
Aroclor 1260	**98**	**(65 - 135)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	111	(60 - 140)
Tetrachloro-m-xylene	108	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F79PC1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A200000-574
Prep Date.....: 01/20/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4020574 **Analysis Time..:** 16:00
Dilution Factor: 1 **Instrument ID..:** G8B
Analyst ID.....: 018568

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Aroclor 1016	**333**	**325**	**ug/kg**	**98**	**SW846 8082**
Aroclor 1260	**333**	**325**	**ug/kg**	**98**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	111	(60 - 140)
Tetrachloro-m-xylene	108	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: E4A160287 **Work Order #...:** F76VG1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-558
Prep Date.....: 01/16/04 **Analysis Date..:** 01/17/04
Prep Batch #...: 4016558 **Analysis Time..:** 14:08
Dilution Factor: 1 **Instrument ID..:** HPLC1
Analyst ID.....: 004357

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**105**	**(50 - 150)**	**SW846 8310**
Acenaphthylene	**109**	**(50 - 150)**	**SW846 8310**
Anthracene	**98**	**(50 - 150)**	**SW846 8310**
Benzo(a)anthracene	**101**	**(50 - 150)**	**SW846 8310**
Benzo(b)fluoranthene	**104**	**(50 - 150)**	**SW846 8310**
Benzo(k)fluoranthene	**104**	**(50 - 150)**	**SW846 8310**
Benzo(ghi)perylene	**96**	**(50 - 150)**	**SW846 8310**
Benzo(a)pyrene	**105**	**(50 - 150)**	**SW846 8310**
Chrysene	**106**	**(50 - 150)**	**SW846 8310**
Dibenz(a,h)anthracene	**93**	**(50 - 150)**	**SW846 8310**
Fluoranthene	**107**	**(50 - 150)**	**SW846 8310**
Fluorene	**104**	**(50 - 150)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**105**	**(50 - 150)**	**SW846 8310**
Naphthalene	**101**	**(50 - 150)**	**SW846 8310**
Phenanthrene	**100**	**(50 - 150)**	**SW846 8310**
Pyrene	**102**	**(50 - 150)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	105	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: E4A160287 **Work Order #...:** F76VG1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E4A160000-558
Prep Date.....: 01/16/04 **Analysis Date..:** 01/17/04
Prep Batch #...: 4016558 **Analysis Time..:** 14:08
Dilution Factor: 1 **Instrument ID..:** HPLC1
Analyst ID.....: 004357

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Acenaphthene	83.3	87.5	ug/kg	105	SW846 8310
Acenaphthylene	83.3	90.8	ug/kg	109	SW846 8310
Anthracene	83.3	81.3	ug/kg	98	SW846 8310
Benzo(a)anthracene	83.3	83.8	ug/kg	101	SW846 8310
Benzo(b)fluoranthene	83.3	86.9	ug/kg	104	SW846 8310
Benzo(k)fluoranthene	83.3	86.3	ug/kg	104	SW846 8310
Benzo(ghi)perylene	83.3	80.3	ug/kg	96	SW846 8310
Benzo(a)pyrene	83.3	87.1	ug/kg	105	SW846 8310
Chrysene	83.3	88.0	ug/kg	106	SW846 8310
Dibenz(a,h)anthracene	83.3	77.7	ug/kg	93	SW846 8310
Fluoranthene	83.3	89.3	ug/kg	107	SW846 8310
Fluorene	83.3	86.6	ug/kg	104	SW846 8310
Indeno(1,2,3-cd)pyrene	83.3	87.5	ug/kg	105	SW846 8310
Naphthalene	83.3	84.1	ug/kg	101	SW846 8310
Phenanthrene	83.3	83.5	ug/kg	100	SW846 8310
Pyrene	83.3	84.6	ug/kg	102	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	105	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID

LCS Lot-Sample#: E4A160000-462 **Prep Batch #...:** 4016462

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum	94	(70 - 115)	SW846 6010B	01/16/04	F759D1AV
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Arsenic	100	(75 - 115)	SW846 6010B	01/16/04	F759D1AW
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Antimony	92	(70 - 115)	SW846 6010B	01/16/04	F759D1AX
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Barium	96	(80 - 115)	SW846 6010B	01/16/04	F759D1A0
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Cadmium	96	(80 - 120)	SW846 6010B	01/16/04	F759D1A1
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Chromium	101	(85 - 120)	SW846 6010B	01/16/04	F759D1A2
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Beryllium	107	(80 - 120)	SW846 6010B	01/16/04	F759D1A3
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Lead	98	(75 - 115)	SW846 6010B	01/16/04	F759D1A4
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Selenium	93	(70 - 110)	SW846 6010B	01/16/04	F759D1A5
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			
Silver	95	(75 - 120)	SW846 6010B	01/16/04	F759D1A6
		Dilution Factor: 1	Analysis Time..: 19:15	Analyst ID.....: 021088	
		Instrument ID..: M01			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	99	(80 - 120)	SW846 6010B	01/16/04	F759D1A7
		Dilution Factor: 1	Analysis Time..: 19:15		Analyst ID.....: 021088
		Instrument ID..: M01			
Copper	100	(80 - 120)	SW846 6010B	01/16/04	F759D1A8
		Dilution Factor: 1	Analysis Time..: 19:15		Analyst ID.....: 021088
		Instrument ID..: M01			
Molybdenum	99	(80 - 120)	SW846 6010B	01/16/04	F759D1A9
		Dilution Factor: 1	Analysis Time..: 19:15		Analyst ID.....: 021088
		Instrument ID..: M01			
Nickel	98	(80 - 120)	SW846 6010B	01/16/04	F759D1CA
		Dilution Factor: 1	Analysis Time..: 19:15		Analyst ID.....: 021088
		Instrument ID..: M01			
Thallium	97	(70 - 120)	SW846 6010B	01/16/04	F759D1CC
		Dilution Factor: 1	Analysis Time..: 19:15		Analyst ID.....: 021088
		Instrument ID..: M01			
Vanadium	100	(80 - 120)	SW846 6010B	01/16/04	F759D1CD
		Dilution Factor: 1	Analysis Time..: 19:15		Analyst ID.....: 021088
		Instrument ID..: M01			
Zinc	102	(80 - 120)	SW846 6010B	01/16/04	F759D1CE
		Dilution Factor: 1	Analysis Time..: 19:15		Analyst ID.....: 021088
		Instrument ID..: M01			

LCS Lot-Sample#: E4A190000-225 **Prep Batch #...:** 4019225

Mercury	100	(80 - 115)	SW846 7471A	01/19/04	F79TD1AC
		Dilution Factor: 1	Analysis Time..: 13:51		Analyst ID.....: 000023
		Instrument ID..: M04			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID

LCS Lot-Sample#: E4A160000-462 **Prep Batch #...:** 4016462

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum	200	189	mg/kg	94	SW846 6010B	01/16/04	F759D1AV
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Arsenic	200	201	mg/kg	100	SW846 6010B	01/16/04	F759D1AW
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Antimony	50.0	45.8	mg/kg	92	SW846 6010B	01/16/04	F759D1AX
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Barium	200	192	mg/kg	96	SW846 6010B	01/16/04	F759D1A0
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Cadmium	5.00	4.78	mg/kg	96	SW846 6010B	01/16/04	F759D1A1
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Chromium	20.0	20.3	mg/kg	101	SW846 6010B	01/16/04	F759D1A2
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Beryllium	5.00	5.37	mg/kg	107	SW846 6010B	01/16/04	F759D1A3
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Lead	50.0	49.1	mg/kg	98	SW846 6010B	01/16/04	F759D1A4
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Selenium	200	185	mg/kg	93	SW846 6010B	01/16/04	F759D1A5
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Silver	5.00	4.75	mg/kg	95	SW846 6010B	01/16/04	F759D1A6
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	50.0	49.6	mg/kg	99	SW846 6010B	01/16/04	F759D1A7
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Copper	25.0	24.9	mg/kg	100	SW846 6010B	01/16/04	F759D1A8
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Molybdenum	100	99.4	mg/kg	99	SW846 6010B	01/16/04	F759D1A9
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Nickel	50.0	49.0	mg/kg	98	SW846 6010B	01/16/04	F759D1CA
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Thallium	200	194	mg/kg	97	SW846 6010B	01/16/04	F759D1CC
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Vanadium	50.0	50.2	mg/kg	100	SW846 6010B	01/16/04	F759D1CD
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				
Zinc	50.0	51.2	mg/kg	102	SW846 6010B	01/16/04	F759D1CE
			Dilution Factor: 1		Analysis Time..: 19:15	Analyst ID.....: 021088	
			Instrument ID..: M01				

LCS Lot-Sample#: E4A190000-225 **Prep Batch #...:** 4019225

Mercury	0.833	0.830	mg/kg	100	SW846 7471A	01/19/04	F79TD1AC
			Dilution Factor: 1		Analysis Time..: 13:51	Analyst ID.....: 000023	
			Instrument ID..: M04				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DG-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DH-MSD
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4016270
Prep Date.....: 01/16/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4016559 **Analysis Time..:** 19:43
Dilution Factor: 1 **Analyst ID.....:** 007050 **Instrument ID..:** MSI

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	74	(50 - 130)			SW846 8270C
	77	(50 - 130)	3.9	(0-35)	SW846 8270C
4-Chloro-3-methylphenol	82	(50 - 120)			SW846 8270C
	80	(50 - 120)	2.2	(0-35)	SW846 8270C
2-Chlorophenol	77	(45 - 125)			SW846 8270C
	71	(45 - 125)	9.1	(0-35)	SW846 8270C
1,4-Dichlorobenzene	67	(35 - 115)			SW846 8270C
	62	(35 - 115)	8.3	(0-35)	SW846 8270C
2,4-Dinitrotoluene	81	(40 - 125)			SW846 8270C
	84	(40 - 125)	3.6	(0-35)	SW846 8270C
4-Nitrophenol	82	(10 - 120)			SW846 8270C
	87	(10 - 120)	5.6	(0-35)	SW846 8270C
N-Nitrosodi-n-propyl-amine	77	(40 - 125)			SW846 8270C
	73	(40 - 125)	6.0	(0-35)	SW846 8270C
Pentachlorophenol	73	(20 - 130)			SW846 8270C
	73	(20 - 130)	0.20	(0-35)	SW846 8270C
Phenol	79	(40 - 110)			SW846 8270C
	73	(40 - 110)	7.9	(0-35)	SW846 8270C
Pyrene	70	(50 - 145)			SW846 8270C
	71	(50 - 145)	1.8	(0-35)	SW846 8270C
1,2,4-Trichloro-benzene	70	(50 - 120)			SW846 8270C
	69	(50 - 120)	2.6	(0-35)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	72	(35 - 140)
	76	(35 - 140)
2-Fluorophenol	76	(35 - 125)
	72	(35 - 125)
2,4,6-Tribromophenol	82	(25 - 135)
	84	(25 - 135)
Nitrobenzene-d5	72	(35 - 130)
	73	(35 - 130)
Phenol-d5	77	(35 - 130)
	73	(35 - 130)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DG-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DH-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	64	(35 - 150)
	66	(35 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DG-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DH-MSD
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4016270
Prep Date.....: 01/16/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4016559 **Analysis Time..:** 19:43
Dilution Factor: 1 **Analyst ID.....:** 007050 **Instrument ID..:** MSI

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acenaphthene	ND	3330	2470	ug/kg	74		SW846 8270C
	ND	3330	2570	ug/kg	77	3.9	SW846 8270C
4-Chloro-3-methylphenol	ND	3330	2730	ug/kg	82		SW846 8270C
	ND	3330	2670	ug/kg	80	2.2	SW846 8270C
2-Chlorophenol	ND	3330	2580	ug/kg	77		SW846 8270C
	ND	3330	2350	ug/kg	71	9.1	SW846 8270C
1,4-Dichlorobenzene	ND	3330	2250	ug/kg	67		SW846 8270C
	ND	3330	2070	ug/kg	62	8.3	SW846 8270C
2,4-Dinitrotoluene	ND	3330	2710	ug/kg	81		SW846 8270C
	ND	3330	2810	ug/kg	84	3.6	SW846 8270C
4-Nitrophenol	ND	3330	2740	ug/kg	82		SW846 8270C
	ND	3330	2900	ug/kg	87	5.6	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	3330	2580	ug/kg	77		SW846 8270C
	ND	3330	2430	ug/kg	73	6.0	SW846 8270C
Pentachlorophenol	ND	3330	2430	ug/kg	73		SW846 8270C
	ND	3330	2430	ug/kg	73	0.20	SW846 8270C
Phenol	ND	3330	2640	ug/kg	79		SW846 8270C
	ND	3330	2430	ug/kg	73	7.9	SW846 8270C
Pyrene	ND	3330	2330	ug/kg	70		SW846 8270C
	ND	3330	2370	ug/kg	71	1.8	SW846 8270C
1,2,4-Trichloro-benzene	ND	3330	2350	ug/kg	70		SW846 8270C
	ND	3330	2280	ug/kg	69	2.6	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	72	(35 - 140)
	76	(35 - 140)
2-Fluorophenol	76	(35 - 125)
	72	(35 - 125)
2,4,6-Tribromophenol	82	(25 - 135)
	84	(25 - 135)
Nitrobenzene-d5	72	(35 - 130)
	73	(35 - 130)
Phenol-d5	77	(35 - 130)
	73	(35 - 130)

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DG-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DH-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	64	(35 - 150)
	66	(35 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	E4A160287	**Work Order #...:**	F74K31CF-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E4A150416-001		F74K31CG-MSD		
Date Sampled...:	01/15/04 16:30	**Date Received..:**	01/15/04 20:00	**MS Run #.....:**	4020187
Prep Date.....:	01/16/04	**Analysis Date..:**	01/16/04		
Prep Batch #...:	4020371	**Analysis Time..:**	14:07		
Dilution Factor:	1	**Analyst ID.....:**	356074	**Instrument ID..:**	G15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**87**	**(65 - 135)**			**SW846 8015B**
	88	**(65 - 135)**	**0.11**	**(0-40)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	106	(70 - 130)
	104	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4A160287 **Work Order #...:** F74K31CF-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A150416-001 F74K31CG-MSD
Date Sampled...: 01/15/04 16:30 **Date Received..:** 01/15/04 20:00 **MS Run #.....:** 4020187
Prep Date.....: 01/16/04 **Analysis Date..:** 01/16/04
Prep Batch #...: 4020371 **Analysis Time..:** 14:07
Dilution Factor: 1 **Analyst ID.....:** 356074 **Instrument ID..:** G15

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Gasoline)	**ND**	**5.00**	**4.37**	**mg/kg**	**87**		**SW846 8015B**
	ND	**5.00**	**4.38**	**mg/kg**	**88**	**0.11**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	106	(70 - 130)
	104	(70 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Lot-Sample #...: E4A160287 **Work Order #...:** F753M1C9 **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30
Prep Date.....: 01/16/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4016556 **MS Run #.....:** 4016265
Dilution Factor: 1 **Analyst ID.....:** 356074 **Instrument ID..:** G02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**0**	**(55 - 125)**	**SW846 8015B**
Diesel Range Organics (C1	**0**	**(60 - 130)**	**SW846 8015B**
Diesel Range Organics (C10-C25)	**0**	**(55 - 130)**	**SW846 8015B**
Motor Oil Range Organics	**0**	**(60 - 130)**	**SW846 8015B**
TPH (as Motor Oil)	**0**	**(60 - 130)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	84	(60 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Lot-Sample #...: E4A160287 **Work Order #...:** F753M1C9 **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30
Prep Date.....: 01/16/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4016556 **MS Run #.....:** 4016265
Dilution Factor: 1 **Analyst ID.....:** 356074 **Instrument ID..:** G02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	**260**	**250**	**218**	**mg/kg**	**0**	**SW846 8015B**
Diesel Range Organics (C1		**250**		**mg/kg**	**0**	**SW846 8015B**
Diesel Range Organics (C10-C25)		**250**		**mg/kg**	**0**	**SW846 8015B**
Motor Oil Range Organics		**250**		**mg/kg**	**0**	**SW846 8015B**
TPH (as Motor Oil)		**250**		**mg/kg**	**0**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	84	(60 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	E4A160287	**Work Order #...:**	F753M1DJ-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E4A160287-001		F753M1DK-MSD		
Date Sampled...:	01/16/04 08:30	**Date Received..:**	01/16/04 12:30	**MS Run #.....:**	4020071
Prep Date.....:	01/19/04	**Analysis Date..:**	01/19/04		
Prep Batch #...:	4020216	**Analysis Time..:**	20:58		
Dilution Factor:	1	**Analyst ID.....:**	356074	**Instrument ID..:**	G02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**106**	**(55 - 125)**			**SW846 8015B**
	87	**(55 - 125)**	**19**	**(0-35)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	95	(60 - 125)
	84	(60 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DJ-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DK-MSD
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4020071
Prep Date.....: 01/19/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4020216 **Analysis Time..:** 20:58
Dilution Factor: 1 **Analyst ID.....:** 356074 **Instrument ID..:** G02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Diesel)	**ND**	**250**	**264**	**mg/kg**	**106**		**SW846 8015B**
	ND	**250**	**218**	**mg/kg**	**87**	**19**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	95	(60 - 125)
	84	(60 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DC-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DD-MSD
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4016267
Prep Date.....: 01/16/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4016557 **Analysis Time..:** 12:03
Dilution Factor: 1 **Analyst ID.....:** 018568 **Instrument ID..:** G5B

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aldrin	**83**	**(50 - 130)**			**SW846 8081A**
	76	**(50 - 130)**	**9.4**	**(0-25)**	**SW846 8081A**
4,4'-DDT	**91**	**(75 - 125)**			**SW846 8081A**
	83	**(75 - 125)**	**9.6**	**(0-25)**	**SW846 8081A**
Dieldrin	**90**	**(75 - 125)**			**SW846 8081A**
	83	**(75 - 125)**	**7.5**	**(0-25)**	**SW846 8081A**
Endrin	**91**	**(70 - 135)**			**SW846 8081A**
	83	**(70 - 135)**	**8.5**	**(0-25)**	**SW846 8081A**
gamma-BHC (Lindane)	**87**	**(70 - 125)**			**SW846 8081A**
	81	**(70 - 125)**	**6.9**	**(0-25)**	**SW846 8081A**
Heptachlor	**85**	**(70 - 130)**			**SW846 8081A**
	78	**(70 - 130)**	**9.2**	**(0-25)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(35 - 140)
	76	(35 - 140)
Decachlorobiphenyl	93	(65 - 135)
	86	(65 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DC-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DD-MSD
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4016267
Prep Date.....: 01/16/04 **Analysis Date..:** 01/19/04
Prep Batch #...: 4016557 **Analysis Time..:** 12:03
Dilution Factor: 1 **Analyst ID.....:** 018568 **Instrument ID..:** G5B

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aldrin	**ND**	**6.67**	**5.56**	**ug/kg**	**83**		**SW846 8081A**
	ND	**6.67**	**5.06**	**ug/kg**	**76**	**9.4**	**SW846 8081A**
4,4'-DDT	**ND**	**13.3**	**12.1**	**ug/kg**	**91**		**SW846 8081A**
	ND	**13.3**	**11.0**	**ug/kg**	**83**	**9.6**	**SW846 8081A**
Dieldrin	**ND**	**13.3**	**12.0**	**ug/kg**	**90**		**SW846 8081A**
	ND	**13.3**	**11.1**	**ug/kg**	**83**	**7.5**	**SW846 8081A**
Endrin	**ND**	**13.3**	**12.0**	**ug/kg**	**91**		**SW846 8081A**
	ND	**13.3**	**11.1**	**ug/kg**	**83**	**8.5**	**SW846 8081A**
gamma-BHC (Lindane)	**ND**	**6.67**	**5.81**	**ug/kg**	**87**		**SW846 8081A**
	ND	**6.67**	**5.42**	**ug/kg**	**81**	**6.9**	**SW846 8081A**
Heptachlor	**ND**	**6.67**	**5.69**	**ug/kg**	**85**		**SW846 8081A**
	ND	**6.67**	**5.19**	**ug/kg**	**78**	**9.2**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	80	(35 - 140)
	76	(35 - 140)
Decachlorobiphenyl	93	(65 - 135)
	86	(65 - 135)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DM-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DN-MSD
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4020280
Prep Date.....: 01/20/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4020574 **Analysis Time..:** 18:05
Dilution Factor: 1 **Analyst ID.....:** 018568 **Instrument ID..:** G8B

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**86**	**(60 - 135)**			**SW846 8082**
	93	**(60 - 135)**	**7.7**	**(0-30)**	**SW846 8082**
Aroclor 1260	**84**	**(65 - 135)**			**SW846 8082**
	92	**(65 - 135)**	**8.9**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	108	(60 - 140)
	115	(60 - 140)
Tetrachloro-m-xylene	105	(50 - 140)
	112	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E4A160287 **Work Order #...:** F753M1DM-MS **Matrix.....:** SOLID
MS Lot-Sample #: E4A160287-001 F753M1DN-MSD
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30 **MS Run #.....:** 4020280
Prep Date.....: 01/20/04 **Analysis Date..:** 01/20/04
Prep Batch #...: 4020574 **Analysis Time..:** 18:05
Dilution Factor: 1 **Analyst ID.....:** 018568 **Instrument ID..:** G8B

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aroclor 1016	**ND**	**333**	**287**	**ug/kg**	**86**		**SW846 8082**
	ND	**333**	**310**	**ug/kg**	**93**	**7.7**	**SW846 8082**
Aroclor 1260	**ND**	**333**	**281**	**ug/kg**	**84**		**SW846 8082**
	ND	**333**	**307**	**ug/kg**	**92**	**8.9**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	108	(60 - 140)
	115	(60 - 140)
Tetrachloro-m-xylene	105	(50 - 140)
	112	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: E4A160287 Work Order #...: F753M1DE-MS Matrix.....: SOLID
MS Lot-Sample #: E4A160287-001 F753M1DF-MSD
Date Sampled...: 01/16/04 08:30 Date Received..: 01/16/04 12:30 MS Run #.....: 4016268
Prep Date.....: 01/16/04 Analysis Date..: 01/17/04
Prep Batch #...: 4016558 Analysis Time..: 15:12
Dilution Factor: 1 Analyst ID.....: 004357 Instrument ID..: HPLC1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	103	(50 - 150)			SW846 8310
	78	(50 - 150)	27	(0-35)	SW846 8310
Acenaphthylene	105	(50 - 150)			SW846 8310
	78	(50 - 150)	30	(0-35)	SW846 8310
Anthracene	98	(50 - 150)			SW846 8310
	91	(50 - 150)	7.3	(0-35)	SW846 8310
Benzo(a)anthracene	103	(50 - 150)			SW846 8310
	95	(50 - 150)	7.9	(0-35)	SW846 8310
Benzo(b)fluoranthene	103	(50 - 150)			SW846 8310
	102	(50 - 150)	1.4	(0-35)	SW846 8310
Benzo(k)fluoranthene	99	(50 - 150)			SW846 8310
	98	(50 - 150)	0.79	(0-35)	SW846 8310
Benzo(ghi)perylene	94	(50 - 150)			SW846 8310
	88	(50 - 150)	7.2	(0-35)	SW846 8310
Benzo(a)pyrene	101	(50 - 150)			SW846 8310
	94	(50 - 150)	7.2	(0-35)	SW846 8310
Chrysene	107	(50 - 150)			SW846 8310
	100	(50 - 150)	6.5	(0-35)	SW846 8310
Dibenz(a,h)anthracene	93	(50 - 150)			SW846 8310
	81	(50 - 150)	14	(0-35)	SW846 8310
Fluoranthene	106	(50 - 150)			SW846 8310
	107	(50 - 150)	0.40	(0-35)	SW846 8310
Fluorene	103	(50 - 150)			SW846 8310
	100	(50 - 150)	2.9	(0-35)	SW846 8310
Indeno(1,2,3-cd)pyrene	105	(50 - 150)			SW846 8310
	96	(50 - 150)	8.4	(0-35)	SW846 8310
Naphthalene	94	(50 - 150)			SW846 8310
	103	(50 - 150)	9.0	(0-35)	SW846 8310
Phenanthrene	102	(50 - 150)			SW846 8310
	96	(50 - 150)	5.5	(0-35)	SW846 8310
Pyrene	102	(50 - 150)			SW846 8310
	104	(50 - 150)	2.8	(0-35)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	108	(50 - 150)
	104	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: E4A160287 Work Order #...: F753M1DE-MS Matrix.....: SOLID
MS Lot-Sample #: E4A160287-001 F753M1DF-MSD
Date Sampled...: 01/16/04 08:30 Date Received..: 01/16/04 12:30 MS Run #.....: 4016268
Prep Date.....: 01/16/04 Analysis Date..: 01/17/04
Prep Batch #...: 4016558 Analysis Time..: 15:12
Dilution Factor: 1 Analyst ID.....: 004357 Instrument ID..: HPLC1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acenaphthene	ND	83.3	86.0	ug/kg	103		SW846 8310
	ND	83.3	65.4	ug/kg	78	27	SW846 8310
Acenaphthylene	ND	83.3	87.7	ug/kg	105		SW846 8310
	ND	83.3	64.6	ug/kg	78	30	SW846 8310
Anthracene	ND	83.3	81.8	ug/kg	98		SW846 8310
	ND	83.3	76.1	ug/kg	91	7.3	SW846 8310
Benzo(a)anthracene	ND	83.3	85.5	ug/kg	103		SW846 8310
	ND	83.3	79.0	ug/kg	95	7.9	SW846 8310
Benzo(b)fluoranthene	ND	83.3	85.8	ug/kg	103		SW846 8310
	ND	83.3	84.6	ug/kg	102	1.4	SW846 8310
Benzo(k)fluoranthene	ND	83.3	82.7	ug/kg	99		SW846 8310
	ND	83.3	82.0	ug/kg	98	0.79	SW846 8310
Benzo(ghi)perylene	ND	83.3	78.3	ug/kg	94		SW846 8310
	ND	83.3	72.9	ug/kg	88	7.2	SW846 8310
Benzo(a)pyrene	ND	83.3	84.5	ug/kg	101		SW846 8310
	ND	83.3	78.6	ug/kg	94	7.2	SW846 8310
Chrysene	ND	83.3	88.8	ug/kg	107		SW846 8310
	ND	83.3	83.2	ug/kg	100	6.5	SW846 8310
Dibenz(a,h)anthracene	ND	83.3	77.5	ug/kg	93		SW846 8310
	ND	83.3	67.1	ug/kg	81	14	SW846 8310
Fluoranthene	ND	83.3	88.7	ug/kg	106		SW846 8310
	ND	83.3	89.0	ug/kg	107	0.40	SW846 8310
Fluorene	ND	83.3	85.6	ug/kg	103		SW846 8310
	ND	83.3	83.2	ug/kg	100	2.9	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	83.3	87.2	ug/kg	105		SW846 8310
	ND	83.3	80.1	ug/kg	96	8.4	SW846 8310
Naphthalene	ND	83.3	78.1	ug/kg	94		SW846 8310
	ND	83.3	85.5	ug/kg	103	9.0	SW846 8310
Phenanthrene	ND	83.3	84.7	ug/kg	102		SW846 8310
	ND	83.3	80.1	ug/kg	96	5.5	SW846 8310
Pyrene	ND	83.3	84.6	ug/kg	102		SW846 8310
	ND	83.3	86.9	ug/kg	104	2.8	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
p-Terphenyl	108	(50 - 150)
	104	(50 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E4A160287-001 **Prep Batch #...:** 4016462							
Aluminum	NC	(70 - 115)			SW846 6010B	01/16/04	F753M1A5
	NC	(70 - 115)		(0-25)	SW846 6010B	01/16/04	F753M1A6
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Arsenic	97	(75 - 115)			SW846 6010B	01/16/04	F753M1A7
	98	(75 - 115)	1.4	(0-25)	SW846 6010B	01/16/04	F753M1A8
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Antimony	29 N	(70 - 115)			SW846 6010B	01/16/04	F753M1A9
	43 N,*	(70 - 115)	38	(0-25)	SW846 6010B	01/16/04	F753M1CA
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Barium	94	(80 - 115)			SW846 6010B	01/16/04	F753M1CC
	93	(80 - 115)	1.1	(0-25)	SW846 6010B	01/16/04	F753M1CD
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Cadmium	91	(80 - 120)			SW846 6010B	01/16/04	F753M1CE
	97	(80 - 120)	5.6	(0-25)	SW846 6010B	01/16/04	F753M1CF
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Chromium	94	(85 - 120)			SW846 6010B	01/16/04	F753M1CG
	105	(85 - 120)	4.4	(0-25)	SW846 6010B	01/16/04	F753M1CH
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Beryllium	104	(80 - 120)			SW846 6010B	01/16/04	F753M1CJ
	106	(80 - 120)	1.7	(0-25)	SW846 6010B	01/16/04	F753M1CK
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	92	(75 - 115)			SW846 6010B	01/16/04	F753M1CL
	96	(75 - 115)	4.4	(0-25)	SW846 6010B	01/16/04	F753M1CM
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Selenium	91	(70 - 110)			SW846 6010B	01/16/04	F753M1CN
	91	(70 - 110)	0.27	(0-25)	SW846 6010B	01/16/04	F753M1CP
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Silver	86	(75 - 120)			SW846 6010B	01/16/04	F753M1CQ
	85	(75 - 120)	1.3	(0-25)	SW846 6010B	01/16/04	F753M1CR
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Cobalt	94	(80 - 120)			SW846 6010B	01/16/04	F753M1CT
	95	(80 - 120)	1.2	(0-25)	SW846 6010B	01/16/04	F753M1CU
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Copper	103	(80 - 120)			SW846 6010B	01/16/04	F753M1CV
	112	(80 - 120)	5.1	(0-25)	SW846 6010B	01/16/04	F753M1CW
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Molybdenum	91	(80 - 120)			SW846 6010B	01/16/04	F753M1CX
	93	(80 - 120)	2.3	(0-25)	SW846 6010B	01/16/04	F753M1C0
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					
Nickel	92	(80 - 120)			SW846 6010B	01/16/04	F753M1C1
	101	(80 - 120)	6.5	(0-25)	SW846 6010B	01/16/04	F753M1C2
		Dilution Factor: 1					
		Analysis Time..: 19:43			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 4016202					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	91	(70 - 120)			SW846 6010B	01/16/04	F753M1C3
	91	(70 - 120)	0.41	(0-25)	SW846 6010B	01/16/04	F753M1C4

Dilution Factor: 1
Analysis Time..: 19:43 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4016202

Vanadium	97	(80 - 120)			SW846 6010B	01/16/04	F753M1C5
	111	(80 - 120)	7.2	(0-25)	SW846 6010B	01/16/04	F753M1C6

Dilution Factor: 1
Analysis Time..: 19:43 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4016202

Zinc	97	(80 - 120)			SW846 6010B	01/16/04	F753M1C7
	136 N	(80 - 120)	19	(0-25)	SW846 6010B	01/16/04	F753M1C8

Dilution Factor: 1
Analysis Time..: 19:43 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 4016202

MS Lot-Sample #: E4A160287-001 **Prep Batch #...:** 4019225

Mercury	113	(80 - 120)			SW846 7471A	01/19/04	F753M1DP
	113	(80 - 120)	0.0	(0-20)	SW846 7471A	01/19/04	F753M1DQ

Dilution Factor: 1
Analysis Time..: 13:54 Instrument ID..: M04 Analyst ID.....: 000023
MS Run #.....: 4020305

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

MS Lot-Sample #: E4A160287-001 **Prep Batch #...:** 4016462

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum									
	12600	200	13100	mg/kg			SW846 6010B	01/16/04	F753M1A5
			Qualifiers: NC						
	12600	200	12900	mg/kg			SW846 6010B	01/16/04	F753M1A6
			Qualifiers: NC						
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Arsenic									
	11.5	200	205	mg/kg	97		SW846 6010B	01/16/04	F753M1A7
	11.5	200	208	mg/kg	98	1.4	SW846 6010B	01/16/04	F753M1A8
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Antimony									
	ND	50.0	14.5 N	mg/kg	29		SW846 6010B	01/16/04	F753M1A9
	ND	50.0	21.3	mg/kg	43	38	SW846 6010B	01/16/04	F753M1CA
			Qualifiers: N,*						
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Barium									
	72.5	200	261	mg/kg	94		SW846 6010B	01/16/04	F753M1CC
	72.5	200	258	mg/kg	93	1.1	SW846 6010B	01/16/04	F753M1CD
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Cadmium									
	0.60	5.00	5.16	mg/kg	91		SW846 6010B	01/16/04	F753M1CE
	0.60	5.00	5.46	mg/kg	97	5.6	SW846 6010B	01/16/04	F753M1CF
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Chromium									
	31.8	20.0	50.6	mg/kg	94		SW846 6010B	01/16/04	F753M1CG
	31.8	20.0	52.8	mg/kg	105	4.4	SW846 6010B	01/16/04	F753M1CH
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Beryllium									
	0.52	5.00	5.72	mg/kg	104		SW846 6010B	01/16/04	F753M1CJ
	0.52	5.00	5.82	mg/kg	106	1.7	SW846 6010B	01/16/04	F753M1CK
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Lead									
	2.9	50.0	48.7	mg/kg	92		SW846 6010B	01/16/04	F753M1CL
	2.9	50.0	50.8	mg/kg	96	4.4	SW846 6010B	01/16/04	F753M1CM
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Selenium									
	1.4	200	183	mg/kg	91		SW846 6010B	01/16/04	F753M1CN
	1.4	200	183	mg/kg	91	0.27	SW846 6010B	01/16/04	F753M1CP
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Silver									
	ND	5.00	4.29	mg/kg	86		SW846 6010B	01/16/04	F753M1CQ
	ND	5.00	4.24	mg/kg	85	1.3	SW846 6010B	01/16/04	F753M1CR
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Cobalt									
	5.9	50.0	52.7	mg/kg	94		SW846 6010B	01/16/04	F753M1CT
	5.9	50.0	53.4	mg/kg	95	1.2	SW846 6010B	01/16/04	F753M1CU
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Copper									
	19.7	25.0	45.4	mg/kg	103		SW846 6010B	01/16/04	F753M1CV
	19.7	25.0	47.8	mg/kg	112	5.1	SW846 6010B	01/16/04	F753M1CW
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum									
	1.8	100	92.9	mg/kg	91		SW846 6010B	01/16/04	F753M1CX
	1.8	100	95.1	mg/kg	93	2.3	SW846 6010B	01/16/04	F753M1C0
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Nickel									
	20.5	50.0	66.3	mg/kg	92		SW846 6010B	01/16/04	F753M1C1
	20.5	50.0	70.8	mg/kg	101	6.5	SW846 6010B	01/16/04	F753M1C2
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Thallium									
	ND	200	182	mg/kg	91		SW846 6010B	01/16/04	F753M1C3
	ND	200	182	mg/kg	91	0.41	SW846 6010B	01/16/04	F753M1C4
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Vanadium									
	48.0	50.0	96.4	mg/kg	97		SW846 6010B	01/16/04	F753M1C5
	48.0	50.0	104	mg/kg	111	7.2	SW846 6010B	01/16/04	F753M1C6
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						
Zinc									
	43.5	50.0	92.1	mg/kg	97		SW846 6010B	01/16/04	F753M1C7
	43.5	50.0	111 N	mg/kg	136	19	SW846 6010B	01/16/04	F753M1C8
			Dilution Factor: 1						
			Analysis Time..: 19:43		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 4016202						

MS Lot-Sample #: E4A160287-001 **Prep Batch #...:** 4019225

Mercury									
	ND	0.167	0.188	mg/kg	113		SW846 7471A	01/19/04	F753M1DP
	ND	0.167	0.188	mg/kg	113	0.0	SW846 7471A	01/19/04	F753M1DQ
			Dilution Factor: 1						
			Analysis Time..: 13:54		Instrument ID..: M04			Analyst ID.....: 000023	
			MS Run #.....: 4020305						

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E4A160287 **Matrix.....:** SOLID
Date Sampled...: 01/16/04 08:30 **Date Received..:** 01/16/04 12:30

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: E4A160287 **Work Order #...:** F74K3-SMP **Matrix.....:** SOLID
F74K3-DUP
Date Sampled...: 01/15/04 16:30 **Date Received..:** 01/15/04 20:00
% Moisture.....: 9.0

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	E4A150416-001	
	9.0	9.0	%	0.0	(0-10)	MCAWW 160.3 MOD	01/16-01/17/04	4016480

Dilution Factor: 1 Analysis Time..: 16:45 Analyst ID.....: 021088
Instrument ID..: W15 MS Run Number..: 4016232

Appendix B

Summary of Metals Results Listed With Site-Specific Import Soil Criteria and Southern California Import Soil Criteria Table

Table I
Summary of Metals Results Listed with Site-Specific Import
Soil Criteria and Southern California Import Soil Criteria
Former C-6 Facility
Los Angeles, California

Sample Identification	Chemical	Reported Concentration (mg/kg)	Site-Specific Import Soil Criterion (mg/kg) Source: H&A 1/2002	Maximum Regional (Southern California) Background Criterion (mg/kg) Source: CAL-EPA 1992
Import_Soil_Crescent_Clifton	Aluminum	12600	43,000	NE
	Arsenic	11.5	14	15.2
	Barium	72.5 J	294	560
	Beryllium	0.52	0.56	1.2
	Cadmium	0.60	1.0	1.45
	Chromium	31.8	48.5	32.6
	Cobalt	5.9	20.0	23.2
	Copper	19.7	49.0	54.0
	Lead	2.9	7.2	189.4
	Molybdenum	**1.8 B**	**2.7**	**1.4**
	Nickel	20.5	37.4	28.2
	Vanadium	48	93.0	84.8
	Zinc	43.5	114	247

B – Result is between reporting limit and MDL
J – Blank contamination. Actual result is likely less than reported.
MDL – Minimum Detection Limit
NE – Not evaluated

QA/QC: _____
Date: _____